

11-1 1862

PRICE LIST 1872.

(All former Lists are hereby Cancelled.)



FROTHINGHAM & WORKMAN,

IMPORTERS & MANUFACTURERS.

WHOLESALE DEALERS

IN

IRON, STEEL, TIN,

AND

GENERAL HARDWARE.

WAREHOUSE AND OFFICES:

**395 to 405, ST. PAUL STREET,
MONTREAL.**

ESTABLISHED 1809.

MANUFACTORIES

ST. PAULS NEAR MONTREAL.

NINTH PUBLICATION



THE ST. PAULS HARDWARE AND EDGE TOOL WORKS
MONTREAL
FROTHINGHAM & WORKMAN, Proprietors.

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ILLUSTRATED CATALOGUE AND PRICE LISTS
OF THE
ST. PAULS MANUFACTURES,
VIZ :
SCYTHES, SHOVELS, SPADES,
GRAIN SCOOPS, HAY & STRAW KNIVES,
DRAINING TOOLS,
HIGGINS' AXES AND OTHER TOOLS,
GILMORES' AUGERS AND AUGER BITS,
Dodge's F. & W. Patent Hammered Horse Shoe Nails,
DUNN'S IMPROVED POINTED AND FINISHED HORSE SHOE NAILS,
WROUGHT IRON WASHERS,
DUNN'S PATENT PRESSED NAILS, SHOE NAILS,
ROUND AND OPEN BLEIGH BELLS, &c. &c.
FROTHINGHAM & WORKMAN,
PROPRIETORS.

F. & W. are Agents for the following (Price Lists of which are appended.)
Axe, Springs: Carriage Bolts, Vulcanized Rubber Belting, Packing and Hose; Leather
Belting; Blacksmiths' Bellows and Forges.
FAIRBANKS' STANDARD SCALES.
Standard Machinists' Stocks and Dies, Solid and Shell Reamers, &c.
Holroyds Stocks and Dies, Gasplates, &c.
American Standard Tool Company's Twist Drills. Machinists Fine Tools.
Holland & Codys universal Angular Drilling Machine and Patent Oilers.
Fitchburg Company's Machinists Tools.
Wilders Shearing Machines for Cloth, &c.
Breech Loading Rifles and Revolvers: Patent Waterproof Metallic Cartridges.
Toy, Bickford & Co's Patent Safety Fuse. Wellington Mills Emery and other Goods.
American Screw Co's Goods.
SMITHS Patent Wood Working Machinery.
J. J. CORDES & CO'S Patent Pressed Nails, Sharp and Flat points.
A. BECKETT & SON'S Canada Temper, Mill, Circular, Cross Cut and other Saws, and
Tools.

T. JOWITT & SON'S celebrated Files and Rasps, and best Warranted Cast, Spring, Ma-
chinery and other Steels.

WEST CUMBERLAND HEMATITE COMPANY'S Boiler Plates, Pig Iron, &c.

AMONG THE CONTENTS OF THIS BOOK WILL BE FOUND LISTS OF
METALS, HEAVY HARDWARE, &c., &c.

TABLES Showing Weight per foot of Bar Iron, Boiler Plate, Brass, Copper, Lead, Tin,
&c.; Weight per Fathom and Proof Strain of Coil and Cable Chains; and other useful in-
formation,

[Faint, illegible text]

1872.

CIRCULAR TO THE HARDWARE TRADE.

We have much pleasure in presenting to the Hardware Trade of Canada our illustrated and descriptive Catalogue and Price List for 1872, to which we beg to call their careful attention. Some valuable additions have been made to its pages, and the prices carefully revised.

The goods of our own manufacture, being much improved in quality and finish are quite equal to any imported from the United States, and are much lower in price.

We can execute all orders promptly, having lately made considerable additions to our works.

We still continue to supply at lowest market prices other Goods of Canadian Manufacture, such as Axles, Springs, Belting, Packing, Hose, Hinges, Rivets, Halifax Skates, &c.

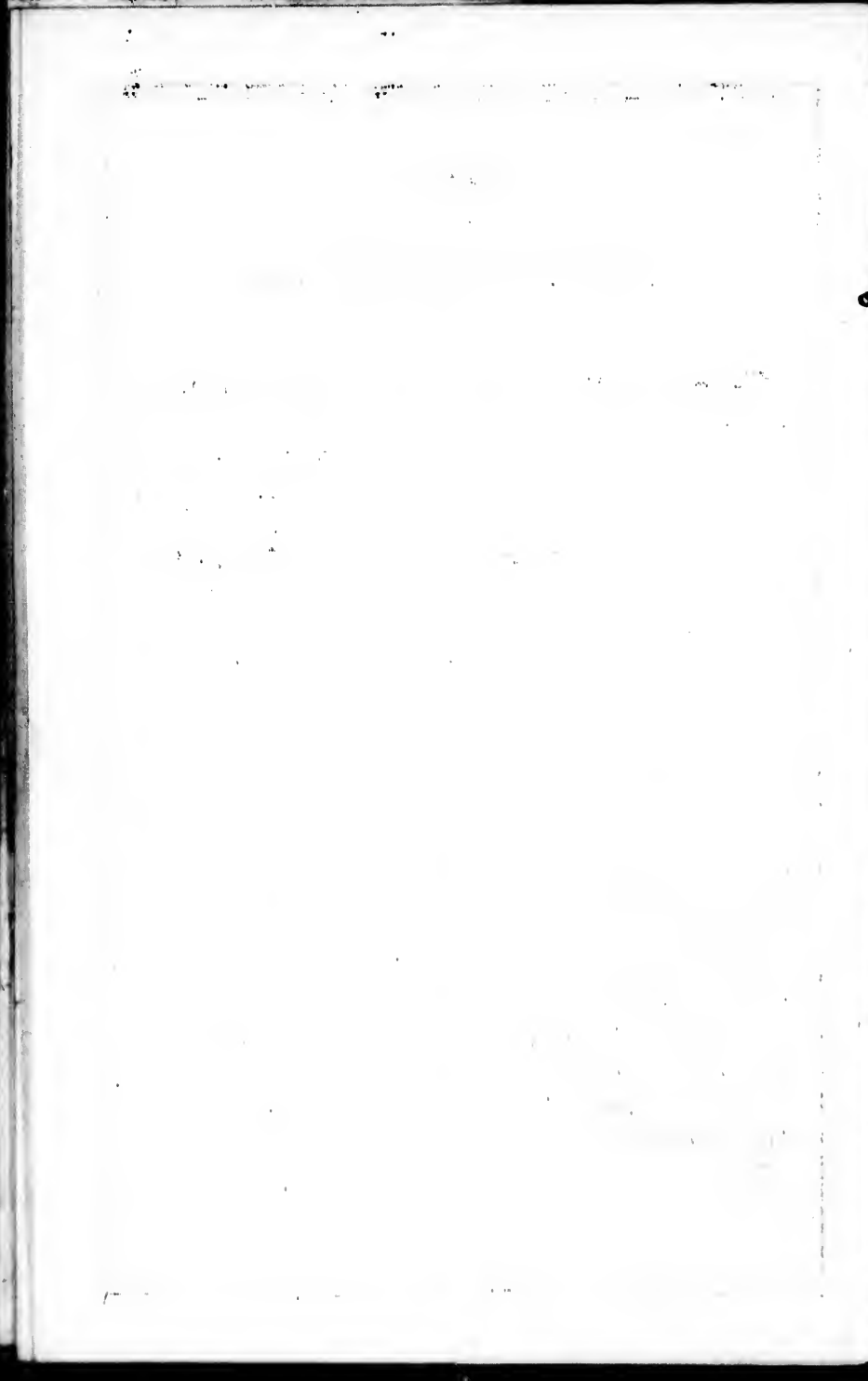
We beg to solicit orders, for importation direct, for Messrs. T. Jowitt & Son's Files and Steel, Messrs. A. Beckett & Son's Saws and Edge Tools; also for other English and Foreign Hardware for which we are Agents.

In ordering please give number and full description of article from this Catalogue.

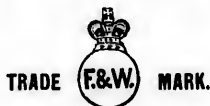
All orders, unless by previous contract, will be filled at prices ruling at date of invoice.

Prices are subject to changes without notification, and all former Lists are hereby cancelled.

FROTHINGHAM & WORKMAN,
MONTREAL.



ST. PAULS SCYTHE WORKS.



SCYTHES.



CANADA PATTERN GRASS.

No. of Pattern.		Price per dozen.
1010	Farwell's Improved German Steel Grass Scythes, full set	\$7.50
2016	" American Pattern Cast Steel " half "	8.50
110	F. & W. Improved Canada Pattern, German Steel, full set ...	8.00
210	" " " Cast Steel, full set	9.00
310	" " " Silver Steel, full set	10.00



AMERICAN PATTERN HALF SET.

112	F. & W. American Pattern, German Steel, half set	\$8.00
212	" " " Cast Steel, "	9.00
312	" " " Extra Polish Silver Steel, half set	10.00
216	" " " not painted (light) C. S. plain, half set	9.00



AMERICAN PATTERN FULL SET.

110	F. & W. American Pattern, German Steel, full set	\$8.00
210	" " " Cast Steel "	9.00
310	" " " Silver Steel "	10.00
310	G C " Golden Cut Bronzed and Painted "	11.50
312	C R " Polished blade, Extra S. S. Bended "	12.00
316	C R " Double Refined Cast Steel Charcoal Temper	12.50
316	C R S " Bronzed, sharpened ready for use, (packed in boxes).	13.50
316	G B " do do Clipper, do	13.50
218	The " Red Rover," made from Double Refined Cast Steel	10.00
318	" " Sharpened ready for use, Silver Steel	11.00
320	Crown Scythes painted Red and Blue, Cast Steel, half set	12.50
22	Solid Cast Steel Blade (Patent) Sharpened ready for use Bronzed, Polished all over, Packed in Boxes	18.00

SCYTHES.—Continued.

No.	CANADA PATTERN BROAD CORN.						Per doz.
110 C	F. & W.	Broad Corn	Scythes	Western Pattern,	German Steel,	full set	\$11.00
112 C	"	"	"	Eastern	"	half "	10.00
210 C	"	"	"	"	Cast Steel	full "	11.50
212 C	"	"	"	"	"	half "	12.00
310 C	"	"	"	Western	Silver Steel	full "	13.00
312 C	"	"	"	"	"	half "	12.50
228	Lawn Scythes, American Pattern, Cast Steel, 22 to 24 inch.						8.00
230	Pea	"	Canada	"	"	27 to 32 "	9.00

- Scythes are put up in dozens assorted sizes to suit purchasers.
- Long Scythes charged extra.

**BRUSH SCYTHE.**

231 Extra Cast Steel, Heavy Brush Scythes, 24 to 26 inch \$11.00

**HAY KNIFE.**

232 Extra Cast Steel Hay Knives, T or L Handle, Moore's Pattern . \$12.50

**STRAW KNIFE.**

233 Moore's Pattern Straw Knives \$12.50

HANDLED HOES.

1	F. & W.	Cast Steel	Field Hoes,	Bright Extra Polish,	Rivett'd..	4.00
2	"	"	"	half "	" " " "	3.50
3	"	Solid Cast Steel	Ladies' Hoes,	Extra Polish.....		4.00
4	"	"	"	Garden Hoes, assorted		4.50
5	"	"	"	Carrot Hoes, Extra Polish.....		4.50
6	"	"	"	Turnip Hoes, assorted 7 to 9 in. blade		5.00
7	"	"	"	Field Hoes.....		5.00
8	"	"	"	Socket Field Hoes, Extra Polish		6.00
11	"	"	"	Hammer Finish Hoes.....		5.75
12	"	"	"	Half Bright Hoes		5.75
15	"	"	"	Dutch Hoes, Handled		4.50
20	Garden Rakes, Malleable Iron, Handled, assd. 10, 12, 14, Tooth.					4.50

ST. PAULS SHOVEL AND SPADE WORKS.



FROTHINGHAM & WORKMAN'S BEST QUALITY CAST STEEL BACK STRAP SHOVELS AND SPADES.

F. & W.	Cast Steel D or Long handle Square point Shovels	Black No. 2...	\$12.00
"	"	Round point Black	" ... 12.00
"	"	D or Long handle Spades Black	" ... 12.00
"	"	D handle Shovels, No. 6 Black	" ... 14.50
"	"	Moulders' Shovels Bright	..... 13.00
"	"	Extra Heavy and Strong Railway Shovels	
		D handle Black	..... 13.00

If polished 50 cents per dozen extra.

FROTHINGHAM & WORKMAN'S BEST QUALITY PLAIN BACK HAMMERED CAST STEEL EDGE SHOVELS AND SPADES.

F. & W.	D or Long handle Square point Shovels	Black No. 2	\$12.00
"	"	Round	" " " 12.00
"	"	Spades	" " " 12.00

If polished \$1.00 per dozen extra.

The Plated Spades and Shovels have plain Backs and best cast steel edges.

F. & W.	Bright London Pattern Shovels, No. 2	.....	\$16.00
"	"	Spades,	..... 15.00

Our London pattern Spades and Shovels have solid forged Shanks let into the handles and have best cast steel edges.

FROTHINGHAM & WORKMAN'S PATENT GRADUATED SOLID CAST STEEL SHOVELS AND SPADES.

F. & W.	Solid C. S. D or Long Handle Shovels	Black No. 2	\$12.00
"	"	Spades Black	" 12.00

If polished \$1.00 per dozen extra.

F. & W.	Solid C. S. D Handle Moulders' Shovels	Bright	\$13.50
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Our PATENT GRADUATED SOLID STEEL Spades and Shovels are plain back and tapered similar to the plated goods, the difference being that they are SOLID CAST STEEL, instead of Steel Edge only, and are consequently much stronger and better than any Spade or Shovel heretofore made in this country.

CAST STEEL SHOVELS AND SPADES STAMPED J. DUNN.

DUNN's	Cast Steel D or Long Handle Shovels	Black No. 2...	\$9.00
"	"	Spades	" " " 9.00
"	"	Round point Shovels	Black " " 9.00

If polished 50 cents per dozen extra.

DUNN's	plated Steel Edge plain back D handle Shovels	Black	
		No. 2...	10.50
"	"	Spades Black	" ... 10.50

If polished \$1.00 per dozen extra.

SHOVELS AND SPADES.—*Continued.*

GERMAN STEEL SHOVELS AND SPADES STAMPED T. FOX.

FOX'S German Steel D or Long handle Shovels Black No. 2.	\$8.00
" " " " " Spades " "	8.00
" " " " " Round point Shovels Black " "	8.00
If polished 50 cents per dozen extra.	

IRON SHOVELS AND SPADES STAMPED KEARNEY.

KEARNEY'S Iron D or Long handle Shovels Black No. 2 ...	\$6.50
" " " " " Spades " " ...	6.50
" " " " " Round point Shovels Black...	6.50
KEARNEY'S Iron D handle Shovels Black No. 6.....	9.00
If polished 50 cents per dozen extra.	

DRAINING SPADES, DITCHING TOOLS, &c.

F. & W.	Cast Steel Edge Drain Spades for Tile Draining			
	No. 1	No. 2	No. 3	No. 4
	\$15	\$18	\$21	\$24 per dozen.
"	Cast Steel Edge Concave Cleaners to push \$15.00			
"	"	"	"	to draw 15.00
"	Socket Hooks for laying Tiles..... 12.00			
"	Draining Tools in Sets, 5 Impliments, per set... 6.50			
"	Cast Steel Edge Post hole Spades, Concave, p. doz. 18.00			
"	Cast Steel Edge Ditching Spades D or T handles 15.00			
"	Cast Steel Edge Clay or Brick Spades, Concave 16.00			
"	Cast Steel Edge Dyke Spades, Socket, no handles 10.00			
"	Solid Cast Steel, Concave Nursery Spades,			
	Socket handles 30.00			
"	Solid Cast Steel Socket Cornish Miners'			
	Shovels, no handles..... 15.00			
"	Solid Cast Steel Telegraph Post hole Scoops,			
	no handles 18.00			
"	Best Hammered Steel Edge Irish Spades			
	T handle Black 14.00			

GRAIN SCOOPS.





FROTHINGHAM & WORKMAN'S CAST STEEL GRAIN SCOOPS.

Size No. 2	4	6	8	10 Black.
\$12.50	\$13.50	\$15.00	\$18.00	\$21.00 per dozen.

If polished 50 cents per dozen extra.

DUNN'S C. S. Grain Scoops No. 2 Bright.....	per dozen	\$11.50
" " " " No. 2 Black.....	"	11.00
F. & W. Iron Grain Scoops No. 2 Black.....	"	9.00
" " " " No. 2 Half polished.	"	9.50
KEARNEY'S Iron Grain Scoops No. 2 Black.....	"	8.00

GOODS NOT ENUMERATED ABOVE MADE TO ORDER.

 All goods stamped with our registered trade mark thus  are manufactured of very best material, by experienced workmen, and are therefore recommended to the trade as reliable goods.

STOVE SHOVELS.


HEAVY SHEET IRON STOVE SHOVELS, wrought Iron Handles,	
Blades $7\frac{1}{2} \times 5\frac{1}{4}$ in.....	\$2.25 per doz.
Ditto ditto ditto with Wood Handles, large size,	
Blades $9 \times 6\frac{1}{2}$ in.....	\$3.00 per doz.


SHOVEL AND SPADE HANDLES.

Bent and Rivetted D handles	\$2.50 per doz.
" " L "	2.00 "

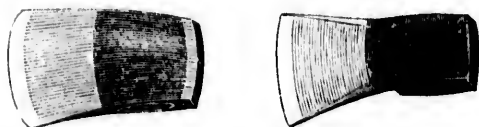
SCYTHE SNATHS, STONES, &C.

Scythe Snaths, Extra quality best selected Timber No. 1...	\$7.00 per doz.
" " Good " " No. 2...	6.00 "
" " Medium " " No. 3...	5.00 "
" " Fair " " No. 4...	4.00 "
" " Common " " No. 5...	— " "
" " with Patent Heel, best selected Timber BB.	8.50 "
" " " " good " " No. 1...	7.50 "
" " " " Medium " No. 2...	6.50 "
Scythe Stones, Indian Pond No. 1.	
" " " " No. 1. Extra.	

 We have always in Stock an assortment of Hay, Straw and Manure Forks, Hay Rakes, &c., &c.

 Attention is called to our PATENT SOLID EYE PICKS AND MATTOCKS on Page 15.

All the foregoing priced by the doz.



ST. PAULS AXE FACTORY.

J. J. HIGGINS & CO'S AXES AND EDGE TOOLS.

CHOPPING AXES.

Chopping Axes, best warranted, cast steel, assorted to 5 lbs.	\$10.00
" " " " " " " 4½ to 5½ "	10.50
" " " " " " " 5 to 6 "	11.00
Quebec, Three Rivers, and other Pattern Canadian Axes, best warranted, cast steel, to 5 lbs.....	10.00
Double Steel Axes, best warranted, cast steel 4 to 5 lbs.....	12.00
Improved pattern Axes to 5 lbs.....	11.00
" " double Steel.....	13.00
Boys' Axes	8.00
Hunters' Axes	7.00

HUDSON'S BAY AXES OR TOMAHAWKS.

¾ lb. \$7.00	1½ lb. \$7.50	2 to 2½ lbs. \$8.00
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HANDLED AXES.

HIGGINS' Handled Chopping Axes, 3½ to 5 lbs	\$14.00
" " " " 2½ to 3 lbs	10.00
Albany " " " 3½ to 5 lbs	11.00
Higgins' " Boys' "	9.00
" " Hunters' "	8.00
" " Hudson's Bay, assorted.....	9.00

BROAD AXES.

Broad Axes, assorted 6 to 7 lbs	\$27.00
" " 7½ to 9 lbs	30.00
" " over 9 lbs	35.00
Canadian Broad Bit Axes	15.00
Ship Carpenters' Axes	24.00

(All priced per Dozen.)

**BENCH AXES HANDLED.**

No. 4	5	6	7	8	9
\$9.00	\$12.00	\$14.00	\$16.00	\$18.00	\$20.00 per dozen.

HATCHETS, HANDLED.

Shingle Hatchets Assorted, best CS.....	\$7.50
Lath Hatchets Assorted, best CS.....	7.50
Shingle " " Stamped Albany.....	5.00
Lath " " " "	5.00
Claw " " Best Cast Steel.....	8.00
Pruning Hatchets " "	8.00

ADZES.

Carpenters' Adzes.....	\$20.00
Railroad "	20.00
Ship Carpenters' Adzes.....	20.00

**PATENT SOLID EYE PICKS WITH CAST STEEL POINTS.**

No. 1	2	3	4	5
3½ to 4½ lb.	5 to 6 lb.	6 to 7 lb.	8 to 10 lb.	10 to 12 lb.
\$11.50 doz.	\$12.00	\$13.00	\$14.50	\$16.00

PATENT SOLID EYE GRUB AND PICK MATTOCKS.

Solid Eye Grub Mattocks, Short Cutter.....	\$13.50
" " " Long Cutter.....	13.50
* " Pick Mattocks.....	13.50

(* This is a very useful article being a Grub Hoe and Pick combined.)

Solid Eye Grub Hoes.....	\$12.00
Improved Brush Hooks.....	9.00

(All priced per Dozen.)

HAMMERS, SLEDGES, &C.

Solid C. S. Masons', and Drilling Hammers...per lb.....	30 cts
" C. S. Ship Carpenters' Mauls.....	" 30 cts
" C. S. Blacksmiths' Hand Hammers, Handled per doz.	\$14.00
Solid Steel Crow Bars, with extra Cast Steel points assorted weights.....	10 cents, per lb.
Axe Handles Nos. 1, 2, and Extra quality.	
Pick " Nos. 1 and 2.	

ST. PAULS AUGER FACTORY.

GILMORE'S AUGERS AND BITS.



TANGED AUGERS G. S. CUT BRIGHT.

$\frac{1}{2}$ inch	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{2}$	$1\frac{1}{2}$ inch.
\$1.80	2.30	2.80	3.30	3.50	3.80	4.00	4.50 per doz.
$1\frac{1}{4}$ inch	2	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{2}$		4 inch.
\$5.00	6.00	7.00	8.00	10.00	13.00		15.00 per doz.



CONVEX NUT AUGERS G. S. CUT BLUE'D LIP.

$\frac{1}{2}$ inch	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{2}$	$1\frac{1}{2}$ inch.
\$2.50	3.00	3.50	4.00	4.50	5.00	6.00	7.00 per doz.
$1\frac{1}{4}$ inch	2	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{2}$		4 inch.
\$8.50	10.00	11.00	13.00	17.00	22.50		30.00 per doz.

CONVEX NUT AUGERS G. S. CUT BRIGHT LIP.

AND

SHORT CONVEX EYE AUGERS G. S. NUT BLUE'D.

$\frac{1}{2}$ inch	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{2}$	$1\frac{1}{2}$ inch.
\$3.00	3.50	4.00	4.50	5.00	5.50	6.00	7.00 per doz.
$1\frac{1}{4}$ inch	2	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{2}$		4 inch.
\$8.50	10.00	11.50	14.00	18.00	25.00		32.50 per doz.

LONG CONVEX EYE AUGERS G. S. CUT BLUE'D.

$\frac{1}{2}$ inch	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{2}$	$1\frac{1}{2}$ inch.
\$3.50	4.00	4.50	5.00	5.50	6.00	7.00	8.50 per doz.
$1\frac{1}{4}$ inch	2	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{2}$		4 inch.
\$9.50	11.00	13.00	16.00	20.00	25.00		35.00 per doz.



SHORT CONVEX EYE AUGERS G. S. CUT BRIGHT LIP.

$\frac{1}{2}$ inch	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{2}$	$1\frac{1}{2}$ inch.
\$3.50	4.00	4.50	5.00	5.50	6.00	7.00	8.50 per doz.
$1\frac{1}{4}$ inch.	2	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{2}$		4 inch.
\$9.50	11.00	13.00	16.00	20.00	25.00		35.00 per doz.

**LONG CONVEX EYE AUGERS C. S. CUT BRIGHT LIP.**

$\frac{1}{2}$ inch	$\frac{3}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$ inch.
\$5.00	4.50	5.00	5.50	6.50	7.50	8.00	9.00 per doz.
$1\frac{1}{4}$ inch	2	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{2}$	4 inch.	
\$11.00	13.00	15.00	18.00	24.00	30.00	40.00	per doz.

CARPENTERS' NUT AUGERS C. S. CUT AND MACHINE AUGERS C. S. CUT.

$\frac{1}{2}$ inch	$\frac{3}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$ inch.
\$3.50	4.00	4.50	5.50	6.50	7.00	7.50	8.50	10.50 per doz.
2 inch	$2\frac{1}{4}$	$2\frac{1}{2}$	3 inch.					
\$13.00	15.00	18.00	23.00					per doz.

BORING MACHINE AUGERS C. S. CUT.

In sets $1\frac{1}{2}$, $1\frac{3}{4}$, 2 inch.....\$2.40 per set.

CARPENTERS' NUT AUGERS SOLID CAST STEEL.

$\frac{1}{2}$ inch	$\frac{3}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 inch.
\$4.50	5.50	6.50	7.50	9.00	10.00	11.50	13.00	15.00	18.00 per doz.

RAFTING AND BOOM AUGERS, EYED.—LONG SHANK AND TWIST.

1 inch	1 $\frac{1}{4}$	1 $\frac{1}{2}$	1 $\frac{3}{4}$	2 inch.
\$11.00	13.00	16.00	20.00	25.00 per doz.
2 $\frac{1}{4}$ inch	2 $\frac{3}{4}$	3	3 $\frac{1}{2}$	4
\$30.00	35.00	40.00	50.00	60.00
				5 inch.
				75.00 per doz.

PUMP AUGERS.

$1\frac{1}{4}$ inch	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{3}{4}$ inch.
\$5.00	5.50	6.50	8.00	9.50	11.00 each.

Rimms for ditto \$1.50 per inch.

**SHIP CARPENTERS' AUGERS SOLID CAST STEEL.**

With or without Screws.

In ordering please say which are required.

6	7	8	9	10	11	12	13 sixteenths.
\$5.00	5.50	6.00	7.00	7.50	8.50	9.00	10.00 per doz.
14	15	16	18	20	22	24 sixteenths.	
\$10.50	11.50	13.50	13.50	15.00	16.50	18.00	per doz.

MILLWRIGHTS' SOLID CAST STEEL AUGERS, IN SETS OR SINGLY.

Millwrights' Solid Cast Steel Augers, 30 cents per $\frac{1}{4}$ inch.

" " " " " Spur Lip, 35 cents per $\frac{1}{4}$ inch.

" " " " " Extension Lip, 45 cents per $\frac{1}{4}$ inch.

**SPUR AUGER BITS SOLID CAST STEEL, BRIGHT LIP.**

3	4	5	6	7	8	9 sixteenths.		
\$2.20	2.00	2.00	2.10	2.20	2.40	2.70 per doz.		
10	11	12	13	14	15	16	18	20 sixteenths.
\$3.00	3.20	3.40	3.60	3.80	4.00	4.30	5.00	5.50 per doz.

DITTO, DITTO, ASSORTED IN DOZENS.

viz: 4 6 8 10 12 sixteenths. } \$2.50 per dozen.
 2 3 3 2 2 Bits.

SPUR AUGER BITS EXTRA QUALITY SOLID CAST STEEL, AND DOWELLING BITS.

3	4	5	6	7	8	9 sixteenths.
\$2.50	2.30	2.40	2.70	3.00	3.40	3.50 per doz.
10	11	12	13	14	15	16 sixteenths.
\$4.10	4.30	4.50	4.80	5.30	5.80	6.50 per doz.

EXTENSION LIP AUGER BITS.

3	4	5	6	7	8	9 sixteenths.
\$3.50	3.00	3.50	4.00	4.50	5.00	5.40 per doz.
10	11	12	13	14	15	16 sixteenths.
\$5.80	6.40	7.00	7.50	8.00	8.50	9.50 per doz.

**MILLWRIGHTS' AND CAR BITS 15 INCHES LONG.**

6	7	8	9	10	11	12 sixteenths.
\$5.00	5.50	6.00	7.00	8.00	8.50	9.50 per doz.
13	14	15	16	18	20	22
\$10.50	11.50	12.50	13.50	15.00	16.50	18.00
						20.00 per doz.

**COOK'S PATENT CAST STEEL AUGER BITS.**

4	5	6	7	8	9	10 sixteenths.
\$4.25	4.50	5.00	5.25	6.00	6.75	7.25 per doz.
11	12	13	14	15		16 sixteenths.
\$8.00	8.75	9.50	10.25	11.00		11.75 per doz.

ALSO,

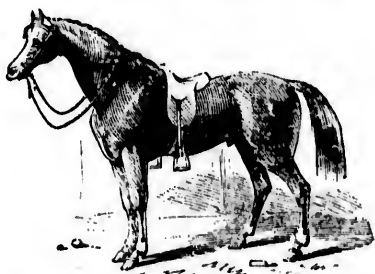
Gimlet Bits, Handled Auger Bits, Patent Expansive Bits, No. 1 - 2,
 Hollow Augers, &c., &c., &c.

Gas Fitters', and other Augers made to order.

Boring Machines No. 1, with graduated Scale. Augers complete

" " " 2, to Bore at an Angle ditto

ST, PAUL'S NAIL WORKS.



DUNN'S IMPROVED HORSE SHOE NAILS

POINTED, FINISHED, HARDENED AND READY FOR DRIVING.



These HORSE SHOE NAILS like Dodges, (also manufactured at our Works,) are made from the very best CHARCOAL NORWAY NAIL RODS, and from the peculiar mode of manufacture the Iron can never be injured by over heating during the Process.

The points are HAMMERED up and BEVILLED, and the heads prepared in the best possible shape for driving, thus saving a great amount of labor to the Farrier.

These Nails are warranted to hold a Shoe longer and firmer than any other, whether HAND or MACHINE MADE, as they are left very stiff in the neck and are consequently less liable to wear in the hole and allow the Shoe to get loose. They are warranted to give entire satisfaction.

To prevent imposition, each box will be stamped with our address in full, and REGISTERED TRADE MARK as above, *without which none are genuine.*

They are put up in boxes of 25 lbs.

All sizes from 6 to 10 lbs., kept constantly in stock at the following prices:

6,	7,	8,	9,	10 lbs.
30,	23,	22,	21,	21 cents per lb.

ST. PAULS NAIL WORKS.—*Continued.*



DODGE'S PATENT HAMMERED HORSE SHOE NAILS.

These *Horse Nails* are also manufactured at our Works, from *best rolled NORWAY RODS*, imported specially for this purpose, and are confidently recommended to the **HARDWARE TRADE**, as being the best Nails ever offered in this Market.

To prevent imposition, each box will be stamped with our address in full and **REGISTERED TRADE MARK** as above, *without which none are genuine.*

They are put up in boxes of 25 lbs.

All sizes from 5 to 12 lbs. kept constantly in stock at the following prices :

5	6	7	8	9	10	11	12 lbs.
30	25	20	19	18	18	18	18 cents per lb.

These Nails measure to weight as follows, viz:—

5	6	7	8	9	10	11	12 lbs.
1 $\frac{3}{4}$	2	2 $\frac{1}{8}$	2 $\frac{1}{4}$	2 $\frac{3}{8}$	2 $\frac{1}{2}$	2 $\frac{5}{8}$	2 $\frac{3}{4}$ inch.

DUNN'S PATENT PRESSED NAILS.

Flat or Sharp Points: 3 in. 2 $\frac{3}{4}$ 2 $\frac{1}{2}$ 2 $\frac{1}{4}$ 2 1 $\frac{3}{4}$ 1 $\frac{1}{2}$ 1 $\frac{1}{4}$ 1 inch.

6 cts. 6 $\frac{1}{2}$ 7 7 $\frac{1}{2}$ 8 8 $\frac{1}{2}$ 9 9 $\frac{1}{2}$ 10 cts. per lb.

Put up in boxes of 50 lbs. No charge for Packages.

DUNN'S CLINCH NAILS.

3 in. 2 $\frac{3}{4}$ 2 $\frac{1}{2}$ 2 $\frac{1}{4}$ 2 1 $\frac{3}{4}$ 1 $\frac{1}{2}$ 1 $\frac{1}{4}$ 1 inch.

5 $\frac{1}{2}$ cts. 5 $\frac{1}{2}$ 5 $\frac{1}{2}$ 5 $\frac{1}{4}$ 6 6 $\frac{1}{2}$ 7 cts per lb.


Put up in Boxes of 50 lbs. No charge for Packages

GORDON'S PATENT PRESSED NAILS.

3 $\frac{1}{2}$ in. 3 2 $\frac{3}{4}$ 2 $\frac{1}{2}$ 2 $\frac{1}{4}$ 2 1 $\frac{3}{4}$ 1 $\frac{1}{2}$ 1 $\frac{1}{4}$ 1 inch

14 12 $\frac{1}{2}$ 10 8 7 5 4 3 $\frac{1}{2}$ 2 $\frac{1}{2}$ lbs. per m.

7 cts. 7 7 $\frac{1}{2}$ 8 8 $\frac{1}{2}$ 9 10 11 13 15 cts. per lb.

 Sharp Points $\frac{1}{4}$ cent per lb. extra. Put up in Iron kegs of 112 lbs.
No charge for packages.

ST. PAULS NAIL WORKS.—*Continued,***CUT TACKS.***Full half Weight.*

2 oz. 2½, 3, 4, 6, 8, 10, 12, 14, 16, 20, 24 oz.
 19 cts. 23 26 30 32 38 44 48 56 64 75 85c. per doz. papers.
 Ditto ditto in boxes of 100 papers assorted 2½ to 12 oz, \$2.50 p. box.
 Leather Head Carpet Tacks, 6, 8, 10 oz. 25c. per doz. papers.

PATENT BRADS.*Full half Weight.*

½ inch. ⅝ ¾ ⅞ 1 1¼ 1½ 1¾ 2 inch.
 45 cts. 50 55 60 75 90 \$1.15 1.40 1.60 per doz. papers.

FINE FINISHING, CLOUT AND TRUNK NAILS.*In 1 lb. papers.*

1 in. and longer, 10 cts., ⅞ in. 11 cts., ¾ in. 12 cts., ½ and ⅝ in.
 14 cts. per lb.

DITTO. DITTO. TINNED.

1 in. and longer 15c., ⅞ in. 16c., ¾ in. 17c., ⅝ and ½ in. 19c. per lb.
 Iron Shoe Nails in bulk.....
 “ “ “ 1 lb. papers.....
 Zinc Shoe Nails, in 1 lb. papers.....
 Hungarian Nails, all sizes.....

SCRAP CUT NAILS.

Cut Nails, all sizes from 2½ lbs. up in Kegs of 100 lbs.
 “ 2 lbs.—Extra.
 Flour Barrel Nails, F. B. “ “ “
 “ “ “ F. F. B. (extra fine) “ viz :
 ⅞ in. \$7.00 1 in. \$6.50 1¼ in. \$6.00 per 100 lbs.
 Finishing Nails, 2 in. and upwards in Kegs of 100 lbs.
 “ “ 1 ¾ 1½ 1¼ 1 in.
 75 cts. \$1.00 \$1.25 \$2.75 per 100 lbs. extra.

BEST PRESSED SPIKES.*(In Casks of 2 cwt.)*

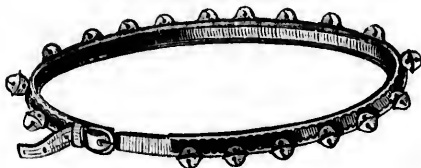
All sizes 5 in. x 5-16 and upwards.....Price \$ per cwt.

EXTRAS ON SPIKES.

5-16 and ⅜ × 4½ inch. 50 cts. per cwt. Extra.
 5-16 and ⅜ × 4 “ 75 cts. “ “ “
 ½ × 6 inch and over 75 cts. “ “ “
 ½ × 5 and 5½ in. \$1.25 cts. “ “ “
 ½ × 4 and 4½ “ 1.75 cts. “ “ “

ROUND AND OPEN SLEIGH BELLS,

HAND, SCHOL HOUSE AND FACTORY BELLS, &c., &c.



ROUND BELLS STRAPPED FOR THE NECK.

No. 101,	9	Polished Brass R'd Bells ass'd from 0 to 4.....	\$0.60
" 102,	11	" " " " 0 to 5.....	0.70
" 107,	11	" " " " 1 to 6.....	0.85
" 110,	11	" " " " 2 to 7.....	1.00
" 114,	15	" " " "No. 0.....	0.60
" 119,	15	" " " " " 1.....	0.65
" 120,	18	" " " " " 1.....	0.75
" 122,	15	" " " " " 2.....	0.80

If Tinned Bells 5 cents per strap extra.

ROUND BELLS STRAPPED FOR THE BACK.

No. 130,	21	Polished Brass Round Bells.....	No. 0.....	\$0.85
" 133,	21	" " " "	" 1.....	0.90
" 135,	19	" " " "	" 2.....	0.95

If Tinned Bells 5 cents per strap extra.

FANCY BACK STRAPS.

Black or Russet Leather, Stitched and Bound.

No. 156,	21	Extra Tinned Round Bells	No. 1.....	\$1.65
" 157,	24	" " " "	" 1.....	1.85
" 159,	21	" " " "	" 2.....	1.90
" 295,	13	Best Silver plated Acorn Bells assorted		4.50
" 300,	15	" " " " "		5.00

FANCY NECK STRAPS.

Black or Russet Leather, Stitched and Bound.

No. 164,	15	Extra Tinned Bells	No. 1.....	\$1.40
" 167,	15	" " " "	" 2.....	1.60
" 310,	12	Best Silver plated Acorn Bells assorted.....		4.00

PLAIN BODY STRAPS.

No. 140, 30 Polished Brass Round Bells	No. 1.....	\$1.35
" 141, 30 " " " " " 2.....		1.60

FANCY BODY STRAPS.

Black or Russet Leather, Stitched and Bound.

No. 169, 30 Extra Tinned Bells.....	No. 1.....	\$3.25
" 170, 36 " " " " " 1.....		3.75
" 172, 30 " " " " " 2.....		3.75
" 320, 30 Plated Acorn Bells assorted	.....	9.00

PLAIN MARTINGALE STRAPS.

No. 145, 30 Polished Brass Round Bells	No. 1.....	\$1.40
" 147, 30 " " " " " 2.....		1.50

OPEN BELLS STRAPPED FOR THE NECK.

No. 200, 12 Open Bells.....	No 1.....	\$1.00
" 203, 10 " " " " " 2.....		1.00
" 205, 11 " " " " " assorted 1 to 3.....		1.25



ROUND SLEIGH BELLS LOOSE.

Polished Brass.

No.	00	0	1	2	3	4
	25c.	30c.	35c.	45c.	60c.	75c. per dozen.
	5	6	7	8	9	10
	90c.	\$1.00	1.20	1.40	1.80	\$2.00 per dozen.

ROUND SLEIGH BELLS LOOSE.

Extra quality Tinned.

No.	00	0	1	2	3	4
	45 c.	55c.	65c.	85c.	\$1.10	\$1.35 per dozen.

BEST SILVER PLATED ROUND BELLS.

No.	0	1	2	3	4
	\$1.00	1.25	1.50	1.75	\$2.20 per dozen.



ACORN SHAPE SLEIGH BELLS.

Silver plated No.	2,	3,	4,	5.
Gold " "	2,	3,	4,	5.

OPEN SLEIGH BELLS.

Tinned or Polished Brass.

No.	60	0	1	2	3	4
	55c.	65c.	75c.	90c.	\$1.30	\$1.70 per doz.

**YORK EYE SLEIGH BELLS.**

White Metal or Brass, Common Shape.

No.	8	10	12	14	16
	\$1.25	1.50	1.75	2.00	\$2.25 per doz.

**YORK EYE SLEIGH BELLS.**

White Metal or Brass Pear Shape.

No.	8	10	12	14	16
	\$1.60	1.80	2.00	2.25	\$2.50 per doz.

N. B.—Orders for Sleigh Bells should be sent in early.

BRASS SHEEP BELLS.

No. 1, 65c. No. 2, 80c. No. 3, \$1.10 per doz.

If strapped, 40 cents per dozen extra.

HAND BELLS.

Heavy Fine Polished.

No.	1	2	4	6	8	10	12
	\$1.50	2.00	3.50	6.00	9.00	16.00	\$20.00 per doz.

Factory, School House, Steamboat and Locomotive Bells made to order.

WHITE METAL COFFIN TACKS.

No. 36.

No.	20	24	30	34	36
	50c.	55c.	60c.	60c.	70c. per gross.

WHITE METAL COFFIN SCREWS.

No. 24.

1½ in.	No. 20	24	30	34	36
	\$1.00	1.00	1.05	1.00	1.15 per gross.
1¾ in.	No. 20	24	30	34	36
	\$1.05	1.05	1.10	1.05	1.20 per gross.
2 in.	No. 20	24	30	34	36
	\$1.10	1.10	1.15	1.10	1.25 per gross.

Also Japanned, White Metal and Silver Plated Coffin Handles
Silver Plated and other Coffin Plates, &c., &c.

PRICES FROM STOCK.

THOMAS JOWITT & SONS' WARRANTED CAST STEEL FILES.

NONE GENUINE EXCEPT STAMPED

CORPORATE MARK

WITH CORPORATE MARK.



INCHES.	4	5	6	7	8	9	10	11	12	13	14	15	16	18
Flat, Square ($\frac{3}{4}$ & up.) and Millsaw Bastard Millsaw, 2nd Cut. ....	.90	1.10	1.25	1.50	1.80	2.15	2.60	3.00	3.60	4.30	5.00	6.50	8.00	10.50
$\frac{1}{4}$ Round, Round and square (to 8 in.) Bastard Hand Bastard. ....	.95	1.15	1.30	1.60	1.90	2.30	2.70	3.30	4.10	4.80	5.80	7.20	8.50	11.50
Hand Smooth.			1.50	1.80	2.20	2.60	3.10	3.70	4.30	5.20	6.30	7.80	9.30	
Flat Smooth and Cabinet Files.			2.20	2.50	3.00	3.50	4.00	4.80	6.00	7.00	8.50	10.00	12.00	
Half Round Smooth Files and Cabinet Rasps	1.30	1.50	1.80	2.20	2.50	3.00	3.50	4.00	4.80	6.00	7.00	8.50	10.00	
Half Round Wood Rasps, Shoe and Horse Rasps.	1.30	1.60	2.00	2.30	2.70	3.20	3.70	4.80	6.00	7.00	8.00	9.00	11.00	
Improved Bevelled edge Horse Rasps.			1.30	1.60	1.90	2.30	2.70	3.30	4.10	4.80	5.80	7.20	8.50	
Tanged Horse Rasps.									5.20	6.20	7.50	9.00		
Single Improved Shoe Rasps.										8.00	9.00	11.00		
Double Improved Shoe Rasps.														
INCHES.	3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	5 $\frac{1}{2}$	6	7	8	9	10	11	12	
3 Square Taper Files. ....	.75	.75	.85	.95	1.05	1.20	1.40	1.90	2.30	2.80	3.70	4.70	5.50	
3 Square Blunts. ....	.95	.95	1.05	1.20	1.40	1.70	1.90							
Pit or Frame Saw Files.				1.20	1.40	1.70	1.90	2.50	2.80	3.20	4.00	5.00	6.00	

Round and Square Parallel Files. Equalling and Parallel Cotter Files, to advance 2 inches on their respective descriptions. Shoe Kit Files \$1.00 per set.

ORDERS FOR IMPORTATION DIRECT SOLICITED.



ALFRED BECKETT & SONS,
SAW AND EDGE TOOLS MANUFACTURERS,
SHEFFIELD.

We have been appointed Sole Agents in Canada for the sale of MILL, CIRCULAR, CROSS CUT, HAND and other Saws; also Chisels, Gouges and other Edge Tools, Skates, &c., of the above celebrated makers.

We have now on hand a full assortment of these Goods, and shall constantly keep them in stock at the following prices; or we will import them to order, at special rates, if preferred.

PRICES FROM STOCK.

EXTRA CAST STEEL HAND, PANEL AND RIPPING SAWS.

Stamped ALFRED BECKETT & SONS "Matchless."

(These are the very best goods made.)

18	20	26	28 inch.
\$9.50	10.50	13.50	\$15.00 per doz.

Combination Hand Saws, 26 inch. \$20.00 per doz.

Matchless London Spring. Hand, Panel and Rip Saws,

26 inch.	28 inch.
\$18.50	\$20.50 per doz.

CAST STEEL HAND, PANEL AND RIPPING SAWS.

Stamped "E. HARTLEY" a good article.

18	20	26	28 inch.
\$7.50	8.00	9.50	\$10.50 per doz.

Combination Hand Saws, 26 inch. \$15.00 per doz.

CAST STEEL HAND, PANEL AND RIPPING SAWS.

Stamped "T. Fox" a fair article.

18	20	26	28 inch.
\$6.00	6.50	7.50	\$8.00 per doz.

Combination Hand Saws, 26 in. \$12.00.

N. B.—The above prices are for Beech Wood Handles, 4 Brass Screws.

Extras on Hand, Panel and Ripping Saws, at following rates, viz:

Raised Steel Screws \$1.00 per dozen extra.

Registered Steel Plates on Handles \$2.00 per dozen extra.

Fine Polished Blades \$4.00 per dozen extra.

Also with Mahogany or other Fancy Handles to order.

**EXTRA CAST STEEL BLUE BACK OR TENON SAWS.**

Stamped ALFRED BECKETT & SONS "Matchless"

10	12	14	16	18 in.
----	----	----	----	--------

\$10.00	10.50	11.00	12.50	14.00 per doz.
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Brass Back ditto	10	12	14	16	18 in.
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\$12.00	13.50	15.00	17.00	18.50 per doz.
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CAST STEEL BLUE BACK SAWS.

Stamped "E. HARTLEY."

10	12	14	16	18 in.
----	----	----	----	--------

\$7.50	8.00	9.00	10.00	11.50 per doz.
--------	------	------	-------	----------------

Brass Back ditto	10	12	14	16	18 in.
------------------	----	----	----	----	--------

\$9.00	10.50	12.00	13.50	15.00 per doz.
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CAST STEEL BLUE BACK SAWS.

Stamped "T. Fox,"

10	12	14	16 in.
----	----	----	--------

\$6.00	6.50	7.00	\$8.00 per doz.
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Extras on Tenon Saws.

If raised Steel Screws 80c. per dozen extra.

If with registered Steel Plates on the handles \$1.50 per dozen extra.

If Fine Polished Blades \$3.00 per dozen extra.

N. B.—The above Tenon Saws may also be had with Mahogany or other fancy wood handles to order.

CAST STEEL COMPASS SAWS, BLUED.

Stamped "E. HARTLEY."

10	12	14	16 in.
----	----	----	--------

\$2.50	2.60	2.75	3.00 per doz.
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BEST CAST STEEL COMPASS SAWS, BLUED.

A. BECKETT & SONS."

10	12	14	16 in.
----	----	----	--------

\$3.25	3.50	3.70	3.90 per doz.
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CAST STEEL FRET SAWS, BLUED.

Assorted Sizes 6 to 12 in. \$1.00 per dozen.

TURNING SAWS, WITH FRAMES.

12	14	16	18 in.
----	----	----	--------

90c,	\$1.00	1.20	1.40 each.
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E. HARTLEY'S CAST STEEL TABLE SAWS.

16 in. \$6.00	18 in. 6.50 per doz.
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E. HARTLEY'S CAST STEEL PRUNING SAWS.

16 in. \$6.50	18 in. \$7.00 per doz.
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IRON BOW SAWS.

10 in. \$1.30	12 in. \$1.50	14 in. \$1.75 each.
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BUTCHERS' BOW SAWS.**HARTLEY'S.**

American Pattern, good quality 18 in. \$16.00 per doz.

A. BECKETT & SONS.

Ditto. ditto Extra quality 18 in. \$21.00 per doz.

BUTCHERS' WEB SAW BLADES.

16	18	20	22 in.
\$2.00	2.50	2.75	\$3.00 per doz.

CAST STEEL COOPER'S WEB SAWS, BLUED.

Assorted to 12 in.	15	18	21	24	27	30 in.
\$1.20	1.60	2.00	2.60	3.20	3.80	4.50 per doz.

CAST STEEL IRON WEB SAWS.

Assorted to 15 in \$2.50 per doz.

CAST STEEL FELLOE SAWS.

21 in.	24	27	30 in.
\$4.00	5.00	6.00	\$7.00 per doz.

CAST STEEL BILLET WEB SAWS, STAMPED "T. FOX."

30 in.	32	34	36 in.
\$4.00	4.50	4.75	\$5.00 per doz.

BEST CAST STEEL BILLET WEB SAWS, STAMPED "E. HARTLEY."

30 in.	32	34	36 in.
\$5.00	5.50	5.75	\$6.50 per doz.

BEST CAST STEEL CANADA WEB SAWS, STAMPED "E. HARTLEY."

42 in.	48	54	60 in.
\$9.00	12.00	14.00	\$17.00 per doz.

E. HARTLEY'S BEST CAST STEEL FRAMED BILLET WEB SAWS.

30 in.	32	34	36 in.
\$7.50	8.00	8.50	\$9.00 per doz.

T. FOX CAST STEEL FRAMED BILLET WEB SAWS.

30 in.	32	34	36 in.
\$6.50	7.00	7.50	\$8.00 per doz.



EXTRA CAST STEEL CROSS CUT SAWS.

Stamped ALFRED BECKETT & SONS, "Matchless."

$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	$6\frac{1}{2}$	7	$7\frac{1}{2}$ feet.
\$2.70	3.00	3.30	3.60	4.00	4.50	\$5.00 each.

BEST CAST STEEL CROSS CUT SAWS.

Stamped "E. HARTLEY."

$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	$6\frac{1}{2}$	7	$7\frac{1}{2}$ feet.
\$2.10	2.40	2.60	3.00	3.20	3.50	\$4.00 each.

CAST STEEL CROSS CUT SAWS.

Stamped "T. Fox."

$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	$6\frac{1}{2}$	7 feet.
\$1.75	1.95	2.10	2.40	2.60	\$2.80 each.

EXTRA CAST STEEL PIT SAWS.

Stamped ALFRED BECKETT & SONS "Matchless."

6	$6\frac{1}{2}$	7 feet.
\$4.00	4.50	\$5.00 each.

BEST CAST STEEL PIT SAWS.

Stamped "E. HARTLEY."

6	$6\frac{1}{2}$	7 feet.
\$3.25	3.50	4.00 each.



WARRANTED EXTRA CAST STEEL MILL AND GANG SAWS.

"CANADA TEMPER."

Stamped ALFRED BECKETT & SONS "Matchless."

No. 15 to 13 Gauge,	12 & 11,	10 & 9	8	7	6 Gauge.
per foot 80 cts.	85	88	\$1.00	1.15	\$1.25



BUTTING OR DRAG SAWS.

No. 12 & 11 Gauge,	10 & 9 Gauge,	8 Gauge.
per foot 85 cts.	90 cts.	\$1.00

MULAY MILL SAWS, TO ORDER.

**WARRANTED EXTRA CAST STEEL MACHINE GROUND CIRCULAR SAWS,
"CANADA TEMPER."**

Stamped **ALFRED BECKETT & SONS "Matchless."**

Size.	Gauge.	Price.	For each additional Gauge Extra.	Size.	Gauge.	Price.	For each additional Gauge Extra.
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
3 in.	19	0.60	0.04	38 in.	10	18.00	1 50
4 "	19	0.65	0.06	38 "	9	21.35	1.75
5 "	19	0.80	0.08	40 "	9	25.00	2.25
6 "	18	1.00	0.10	42 "	8	30.00	2.75
7 "	18	1.18	0.12	44 "	8	36.50	3.20
8 "	17	1.40	0.14	46 "	7	43.00	3.75
9 "	16	1.62	0.16	48 "	6	50.50	4.50
10 "	15	1.80	0.18	50 "	6	58.00	4.74
12 "	15	2.25	0.20	52 "	6	69.00	6.30
14 "	15	2.70	0.24	54 "	6	76.00	7.50
16 "	14	3.15	0.30	56 "	5	92.00	9.00
18 "	14	4.00	0.40	58 "	5	107.00	10.50
20 "	13	5.20	0.48	60 "	5	112.00	12.00
22 "	13	6.10	0.52	62 "	5	141.00	13.50
24 "	12	7.20	0.60	64 "	5	162.00	15.75
26 "	12	8.40	0.70	66 "	5	170.00	18.00
28 "	12	9.90	0.80	68 "	4	198.00	20.00
30 "	11	11.70	0.90	70 "	4	220.00	22.50
32 "	11	13.50	1.00	72 "	4	245.00	25.00
34 "	10	15.75	1.20				

When ordering Circular Saws give the following particulars.

Diameter of Saws.

Gauge at Edge and also at center if required thicker.


Rip or Cross Cut.

Right or left hand saw.

Give the log side of a Circular saw as you stand in front with it cutting towards you, stating on which side the log or bolt is.

If a Shingle Saw is required, state the distance from center at which the taper commences, and send exact draft, shewing position and size of rivet holes for attaching flange.

Shingle Saws, and Endless Band Saws, to order.

 Orders for importation of Saws direct solicited.

N. B.—All first quality Saws will be stamped,—

ALFRED BECKETT & SONS.



In addition to which they will  have our own registered trade mark, thus;  and all Goods so stamped are warranted equal to the best made.

The Mill and Circular Saws are tempered specially to suit the climate of Canada. We can therefore with confidence recommend them.

Also, Stone's Patent Circular Saw Gummers.

PRICE LIST

OF

BECKETT'S EDGE TOOLS &c.



CAST STEEL FIRMER CHISELS.

Stamped "E. HARTLEY."

to $\frac{1}{4}$ in.	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 in.
80c.	85c.	95c.	1.10	1.20	1.30	1.50	2.00	2.50	3.20	3.70 per doz.
ditto	ditto		in sets of 9— $\frac{1}{4}$ to $1\frac{1}{2}$ inch \$1.10 per set.							
"	"		" of 12— $\frac{1}{4}$ to 2 inch 1.70 "							

EXTRA CAST STEEL FIRMER CHISELS.

ALFRED BECKETT & SONS "Matchless."

to $\frac{1}{4}$ in.	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 in.
90c.	1.00	1.10	1.20	1.30	1.50	1.70	2.30	2.80	3.60	\$4.30 per doz.
ditto	ditto		in sets of 9— $\frac{1}{4}$ to $1\frac{1}{2}$ inch \$1.30 per set.							
"	"		" of 12— $\frac{1}{4}$ to 2 inch 2.00 "							



C. S. FIRMER GOUGES.

Stamped "E. HARTLEY."

to $\frac{1}{4}$ in.	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 in.
\$1.00	1.10	1.20	1.30	1.40	1.50	1.70	2.30	2.90	3.70	\$4.50 per doz.

EXTRA C. S. FIRMER GOUGES.

ALFRED BECKETT & SONS "Matchless."

to $\frac{1}{4}$ in.	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 in.
\$1.10	1.20	1.30	1.40	1.50	1.70	2.00	2.70	3.30	4.25	\$5.20 per doz.
ditto	ditto		in sets of 9— $\frac{1}{4}$ to $1\frac{1}{2}$ inch \$1.70 per set.							
"	"		" of 12— $\frac{1}{4}$ to 2 inch 2.30 "							

EXTRA C. S. LONG THIN PARING CHISELS.

ALFRED BECKETT & SONS "Matchless."

$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 in.
\$1.00	2.30	3.00	4.00	5.00	6.00	\$7.00 per doz.
ditto	ditto		in sets of 9— $\frac{1}{2}$ to $1\frac{1}{2}$ inch \$2.50 per set.			
"	"		" of 12— $\frac{1}{2}$ to 2 inch 3.50 per set.			

**C. S. BLUED SOCKET CHISELS.**

Stamped "E. HARTLEY."

$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 in.
\$2.10	2.15	2.20	2.30	2.50	2.70	2.80	3.00	3.50	4.20	\$5.00 per dozen.

EXTRA C. S. BLUED SOCKET CHISELS.

ALFRED BECKETT & SONS "Matchless."

$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 in.
\$2.40	2.50	2.60	2.70	2.80	3.00	3.20	3.50	4.00	4.90	\$5.80 per dozen.

A. BECKETT & SONS C. S. MILLWRIGHTS CHISELS.In sets of 10— $\frac{1}{4}$ to 2 inch \$4.30 per set.**A. BECKETT & SONS C. S. MILLWRIGHTS GOUGES.**In sets of 10— $\frac{1}{4}$ to 2 inch \$5.20 per set.**A. BECKETT & SONS C. S. TURNING CHISELS.**

$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 in.
\$1.50	1.70	1.90	2.10	2.30	2.50	3.30	4.30	5.00	6.00	per dozen.
ditto	ditto	ditto	ditto	ditto	ditto	ditto	ditto	ditto	ditto	in sets of 9— $\frac{1}{4}$ to 2 inch \$2.70 per set.

A. BECKETT & SONS C. S. TURNING GOUGES.

$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 in.
\$1.80	2.00	2.20	2.60	2.90	3.30	4.50	6.00	7.00	\$8.50 per dozen.
	ditto	ditto			in sets of 9— $\frac{1}{4}$				to 2 inch \$3.20 per set

A. BECKETT & SONS C. S. BRIGHT CENTRE BITS.

$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{1}{2}$ in.
\$1.00	1.00	1.05	1.10	1.20	1.25	1.30	1.60	1.80	2.10	\$2.25 per dozen.

A. BECKETT & SONS C. S. BRIGHT SHELL, SPOON AND NOSE BITS.

$\frac{1}{4}$	3-16	$\frac{1}{2}$	5-16	$\frac{3}{4}$	$\frac{1}{2}$ in.
\$1.00	1.00	1.05	1.10	1.20	\$1.50 per dozen.

C. S. Taper Shell Bits assorted \$1.40 per dozen.

A. Beckett & Sons C. S. Bright Square and Half Round

Rimmers..... 1.10 "

A. Beckett & Sons Flat head, Snail horn and Rose head

Countersinks 1.10 "

A Beckett & Sons Turnerscrew Bits plain and forked..... 1.10 "

C. S. Gimlet Bits assorted $\frac{1}{4}$ to 5-16..... 1.00 "

C. S. Nail sets, 70 cents per doz.

CAST STEEL CUT PLANE IRONS.

Stamped "E. HARTLEY."

2 in.	2½	2½	2¾	2½	2¾ inch.
\$1.80	1.90	2.20	2.30	2.50	\$2.70 per dozen.

C. S. DOUBLE PLANE IRONS.

"E. HARTLEY."

2 in.	2½	2½	2¾	2½	2¾ inch.
\$3.40	3.60	3.80	4.00	4.40	\$4.60 per dozen.

EXTRA C. S. CUT PLANE IRONS.

A. BECKETT & SONS "Matchless."

2 in.	2½	2½	2¾	2½	2¾ inch.
\$2.00	2.20	2.50	2.65	2.85	\$3.00 per dozen.

EXTRA C. S. DOUBLE PLANE IRONS.

A. BECKETT & SONS "Matchless."

2 in.	2½	2½	2¾	2½	2¾ inch.
\$3.90	4.10	4.40	4.60	5.00	\$5.25 per dozen.

**C. S. BRIGHT LONDON PATTERN TURNSCREWS.**

3 in.	4	5	6	7	8 inch.
\$1.30	1.50	1.80	2.10	2.50	\$3.00 per dozen.

EXTRA QUALITY C. S. BRIGHT LONDON PATTERN TURNSCREWS.

3 in.	4	5	6	7	8	9 inch.
\$1.60	1.90	2.20	2.60	3.10	3.70	\$4.10 per dozen.

BEST BOX HEAD C. S. SHELL GIMLETS.

No. 1 assorted to ½ inch \$9.00 per gross.

No. 2 " " " " 6.50 "

No. 3 " " " " 3-16" 4.50 "

BEST BOX HEAD C. S. PATENT TWIST GIMLETS.

No. 1 assorted to ½ inch \$10.00 per gross.

No. 2 " " " " 7.00 "

No. 3 " " " " 6.00 "

BEST C. S. SPIKE GIMLETS.

Assorted ¼ to ¾ inch \$1.50 per dozen.

TAP BORERS, HANDLED.

Assorted ¼ to 2 inch \$5.00 per dozen.

EXTRA QUALITY SCREW BOXES AND TAPS.

¾	½	¾	¾	1	1¼	1½	1¾	2 inch.
\$1.00	1.05	1.10	1.20	1.50	1.80	2.40	3.00	3.80 each.

TIMBER SCRIBES.

Ottawa Pattern \$4.70 per dozen.

BEST QUALITY PLATED SQUARES.

4½	6	7½	9	10½	12	15 inches.
\$4.25	5.00	6.00	7.20	8.20	9.20	\$13.00 per doz.

BEST QUALITY SLIDING T. BEVILS.

7½	9	10½	12 inches,
\$6.30	7.00	8.00	\$9.00 per doz.

If with Thumbscrews 75 cents per dozen extra.

BEST QUALITY MARKING, CUTTING AND MORTISE GAUGES.

\$1.00	2.00	3.00	4.00	6.00	9.00	12.00	\$14.00 per doz.
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BEECH PLATED BRACES.

With 18	24	30	36 C. S. Bright Bits.
\$3.50	4.00	4.50	\$5.00 each.

BEST QUALITY BEECH PLATED BRACES.

With 18	24	30	36 C. S. Straw Colored Bits.
\$4.50	5.00	5.75	6.50 each.

PATENT METALLIC FRAMED BRACES.

With 30	36	42 C. S. Straw Colored Bits.
\$7.50	8.00	\$8.50 each.

SCOTCH IRON BRACES, BRIGHT.

No. 1	2	3
\$1.25	1.75	\$2.25 each.

GERMAN BALL BRACES.

No. 1	2	3	4
\$2.75	3.25	3.75	\$5.00 p. doz.

SPOKESHAVES.

	2 to 2½	3	3½ inches.
Beech Spokeshaves C. S. Irons	\$2.00	2.30	\$2.60 per dozen.
Best quality ditto ditto	2.70	3.10	3.50 "

SPOKESHAVES.—Continued.

			2 to 2½	3	3½ inches.
Beech Plated Spokeshaves C. S. Irons.			\$2.50	3.00	\$3.50 per doz.
Best quality	ditto	ditto	3.30	4.00	4.50 "

BEECH PLATED SPOKESHAVES C. S. IRONS WITH THUMBSCREW.

3 inches.	\$8.40	3½ inches.	\$9.00 per doz.
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BEST QUALITY C. S. DRAWING KNIVES.

10	11	12	13	14 inches.
\$6.50	7.00	7.75	8.50	9.25 per doz.

BEST CAST STEEL CARPENTERS ADZES.

American Pattern.....	\$10.50 per doz.
Spout Adzes.....	12.00 "

MEAT CHOPPERS, handled.....	\$6.50 "
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GARDEN IMPLEMENTS.

Garden Hoes, 4 in.	\$1.80	5 in.	\$2.00	6 in.	\$2.50	8 in.	\$3.00	doz.
Dutch Hoes.....		4 in.	2.50	5 in.	2.80	6 in.	3.20	"
Garden Spuds 1½ to 1¾ inch	\$1.25						"	
Weed Hooks	1.50						"	
Spuds and Hooks.....	2.00						"	
Garden Trowels	2.50						"	
Garden Shears No. 101, 9 inch.	\$1.25	10 inch.	\$1.50 each.					
Grass Shears No. 104, 9 "	1.75	10 "	2.00 "					
Sliding Shears No. 110, 8 "	2.50	9 "	2.75 "					
Ladies Garden Tools in Sets	No. 125,	No. 0,	60c. per set.					
" " " "	No. 125,	No. 1,	\$1.00 "					
" " " "	No. 125,	No. 2,	1.50 "					
" " " "	No. 130,	No. 1,	60c. "					
" " " "	No. 130,	No. 2,	1.20 "					
" " " Spades	No. 125,	No. 2,	5.50 per doz.					
" " " "	No. 130,	No. 2,	4.50 "					

SHIP SCRAPERS, Handled.....	3.00 "
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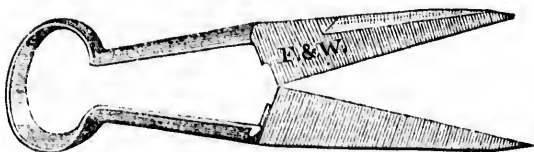
SAYNOR & COOKS Garden Implements imported to order.

TOOL CHESTS.

Nos. 103	105	107	110	113	115	117	119
\$1.20	2.50	3.50	5.00	10.00	16.00	25.00	\$35.00 each.

Also, Bill Hooks, Mincing Knives, Skates, Masons, Bricklayers, Plastering and Pointing Trowels.

Orders for importation direct solicited for all the above goods.



A. BECKETT & SONS Warranted C. S. SHEEP SHEARS.

Stamped **F. & W.** MATCHLESS.

GLAZED CAST STEEL SHEEP SHEARS, BENT BLADES.

No. 4 B, 6 inch. Blades \$1.50 per doz.

BRIGHT C. S. SWAGED SHEEP SHEARS, BENT BLADES.

No. 18 B, 5½ inch.	6 inch.	6½ inch. Blades.
\$1.80	5.00	\$5.50 per doz.

BEST BRIGHT CAST STEEL SWAGED SHEEP SHEARS, BENT BLADES.

No. 24 B 5½ inch.	6 inch.	6½ inch. Blades.
\$5.50	6.00	\$1.50 per doz.

IMPROVED TROWEL SHANK CAST STEEL BRIGHT SWAGED SHEEP SHEARS.

No. 53—5½ inch.	6 inch.	6½ inch. Blades.
\$8.00	8.50	\$9.00 per doz.

A. BECKETT & SONS Patent Spring SHEEP SHEARS.

GLAZED C. S. SHEEP SHEARS BENT BLADES, PATENT SPRINGS.

No. 4, B P. 6 inch. Blades \$5.75 per doz.

BRIGHT C. S. SWAGED SHEEP SHEARS BENT BLADES, PATENT SPRINGS.

No. 18 B P. 5½ inch.	6 inch.	6½ inch. Blades.
\$6.00	6.50	\$7.00 per doz.

BEST BRIGHT CAST STEEL SWAGED BENT BLADES, PATENT SPRINGS.

No. 24 B P. 5½ inch.	6 inch.	6½ inch. Blades.
\$6.50	7.00	\$7.75 per doz.

IMPROVED TROWEL SHANK CAST STEEL SWAGED SHEEP SHEARS, PATENT SPRINGS.

No. 53 P. 5½ inch.	6 inch.	6½ inch. Blades.
\$9.00	9.50	\$10.50 per dozen.

A. BECKETT & SONS Warranted C. S. HORSE SHEARS.

No. 2 Glazed \$1.00 per doz.

No. 5 Bright 4.50 " "

CIRCULAR HORSE SHEARS TROWEL SHANK CAST STEEL.

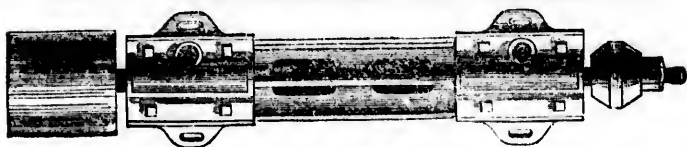
No. 1 C. \$7.50 per doz.

N. B.—These Sheep Shears are of first rate quality, much superior to the Shears generally sold in this market, they are warranted quite equal to the celebrated Wilkinson's Shears and at much less price.

Orders for direct importation solicited from the Hardware Trade, and a large discount allowed on such orders.

All Sheep and Horse Shears made by Messrs. Beckett & Sons will be Stamped "F. & W. Matchless" without which none are genuine.

SAW MANDRILS OR ARBORS.



STANDARD STEEL SAW MANDRILS OR ARBORS WITH SELF OILING BOXES.

Number of Arbor.	Size of Saw.	Distance from centre to centre of ear pieces	Distance between Pulley and Saw.	Diameter of Pulley.	Face of Pulley.	Diameter of Collars.	Diameter of Arbor.	Hole in Saw.	Length of Bearing.	Price.
1	to 10 in	14 in.	20 in	4 in.	4½ in.	3 in.	1 in.	¾ in.	5 in.	\$10
2	" 14	15½	22	4½	5	3½	1½	1	5½	13
3	" 18	16½	24	5	5	4	1½	1½	6	17
4	" 24	18½	26	6	6½	4½	1¾	1½	6½	20
5	" 28	19½	28	7	7	5	1½	1¾	7	24
6	" 36	21	30	8	8	5½	1¾	1½	7½	28
7	" 42									30
8	" 48									32
9	" 54									36
10	" 60									40

N. B.—From their peculiar construction, the Boxes of these Saw Arbors (being attached to a solid bed plate of iron) cannot get out of line, and as they are SELF OILING cannot heat.

STONES SAW GUMMERS.

Price \$15.00—Extra Cutters for ditto \$1.00 to \$2.00 each.

DRAWING KNIVES.

Canada make.



SOLID CAST STEEL DRAWING KNIVES.

8	9	10	11	12	13	14 inch.
\$8.00	\$9.00	\$10.00	\$11.00	\$12.00	\$13.00	\$14.00 per doz.

In finish and quality these *solid steel* Drawing Knives are very superior. Sheffield Cast Steel Drawing Knives list on page 35

LETTER AND FIGURE PUNCHES.

BEST CAST STEEL LETTER PUNCHES.

¼	3-16	¼	5-16	¾	½ inch.
\$2.50	\$3.00	\$3.50	\$4.00	\$5.00	\$6.00 per set.

BEST C. S. FIGURE PUNCHES.

¼	3-16	¼	5-16	¾	½ inch.
80c.	90c.	\$1.20	\$1.50	\$1.75	\$2.00 per set.



NAIL

AND OTHER

HAMMERS.

SOLID CAST STEEL HAMMERS.

No. 1, Adze Eye Nail Hammers, Solid Steel.....	\$10.00
" 1½ " " " " "	9.00
" 2, " Horse Shoeing Hammers, Solid Steel	6.50
" 3, Claw Hammers, Solid Steel	6.50
" 4, Brad " " " " "	3.50
" 5, Shoeing " " " " "	4.00
" 6, Bench " " " " "	5.00
" 7, Smiths' " " " " "	16.00
" 8, " " " " "	13.00
" 9 Machinists' Hammers, Solid Steel	8.50
" 10, " " " " "	7.50
" 12, Rivetting " " " " "	6.00
" 13, " " " " "	5.00
" 14, " " " " "	4.50

STEEL FACE HAMMERS.

No. 15 Smiths' Steel Face and Pene	\$11.00
" 16, " " " " "	10.00
" 17, Nail Hammers, Steel Face and claw	5.00
" 18, " " " " "	4.00
" 19½ " Steel Face	3.50
" 20, " All Iron	2.50
" 21, Coopers' Hammers	12.00
" 22, Nail Hammer, Steel Face and Claw Adze Eye	6.00
" 23, " " Malleable Iron Adze Eye	4.75
" 24, " " Cast Iron Adze Eye	2.50

SOLID CAST STEEL CHIPPING HAMMERS.

No. 8.



No. 9.



22.

Jowitt's Solid Cast Steel Chipping and other Engineer's Hammers.

Of various patterns, assorted weights, 1½ to 3 lbs. each 45¢. per lb.

Steel Face Sledge Hammers.**Jowitt's warranted Steel Face Sledge and Hand Hammers.**

Assorted weights, 3 to 16 lbs. at 20 cents per lb.

ATTWOODS Steel Face ditto at 9 cents "

PATENT WRENCHES.



TAFT'S PATENT BLACK.

8 inch.	10	12	15	18	21 inch.
\$5.00	6.00	7.00	12.00	15.00	\$18.00 per doz.

Extra Heavy Wrenches for Agricultural Machines 11 in. \$7.00 per doz.



COE'S PATENT BLACK.

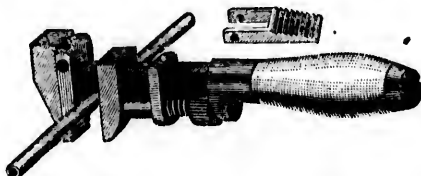
8 inch.	10	12	15 inch.
\$7.00	8.50	10.00	\$15.00 per doz.

COLLINS' PATENT WRENCHES.

These are style of Coe's but a very much stronger and better article, as every wrench is warranted to bear 100 lbs. strain for each inch of its length.

8 inch.	10	12	15	18	21 inch.
\$10.00	12.00	14.00	23.00	29.00	\$35.00 per doz.

PAGE'S AUXILIARY JAW.



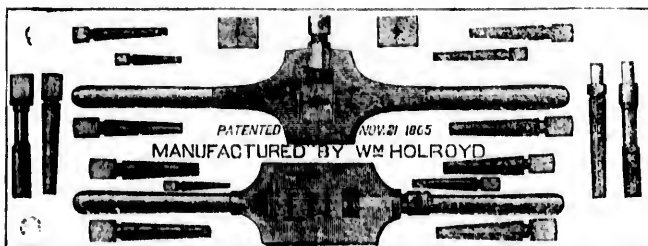
To be used with the common Monkey Wrench, for turning Gas Pipe, or any round bodies which need Pipe Tongs.

One Jaw, costing \$1.00, will take the place of a whole set of Gas Tongs, costing from \$15.00 to \$25.00.

This Jaw is EASILY ADJUSTED, and can be carried in the vest pocket.

JAW for 6 inch. Wrench.....	\$3.00 per doz.
" 8 " "	7.20 "
" 10 " "	9.00 "
" 12 " "	12.00 "
" 15 " "	15.00 "

HOLROYD'S STOCKS AND DIES.

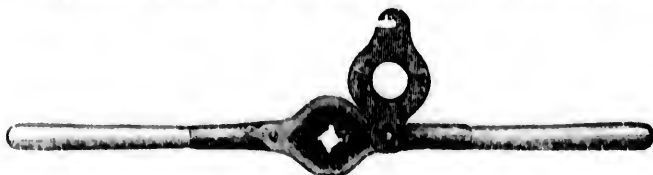


No. 1 R & L 2	to 1 in. \$30.00 each.	No. 31 R H	3-1 to 5-16 ... \$1.50 each.
" 5 "	1-1-2 to 3-1 ... 35.00 "	" 35 "	3-1 to 3-8 ... 1.00 "
" 7 "	1-1-4 to 5-8 ... 12.00 "	" 47 "	5-8 to 1-4 ... 5.50 "
" 11 "	1-1-4 to 5-8 ... 10.00 "	" 45 R & L	5-8 to 5-16 ... 5.50 "
" 15 R H	1-1-4 to 1-2 ... 10.00 "	" 37 R H	5-8 to 3-16 ... 4.25 "
" 17 R & L 1	to 1-2 ... 9.00 "	" 38 R & L	5-8 to 5-16 ... 4.50 "
" 19 R H 1	to 3-8 ... 9.00 "	" 49 "	1-2 to 1-4 ... 4.50 "
" 21 R & L 1	to 1-2 ... 6.00 "	" 51 R H	1-2 to 3-16 ... 4.50 "
" 23 R H 1	to 3-8 ... 5.00 "	" 41 "	1-2 to 1-8 ... 3.25 "
" 25 R & L	3-1 to 3-8 ... 0.50 "	" 42 "	1-2 to 5-16 ... 3.50 "
" 27 R H	3-1 to 3-8 ... 0.50 "	" 53 "	5-16 to 3-16 ... 2.75 "
" 32 R & L	3-1 to 3-8 ... 5.00 "	" 55 "	5-16 to 1-8 ... 2.75 "

EXTRA TAPS, RIGHT OR LEFT.

$\frac{1}{8}$ to 5-16 in.	$\frac{3}{8}$	7-16 & $\frac{1}{2}$	9-16 & $\frac{5}{8}$	$\frac{3}{4}$	1	1 $\frac{1}{8}$	1 $\frac{1}{2}$ in.
\$3.60 p. doz.	4.20	4.80	6.00	7.80	10.80	15.00	21.00 26.00 p. doz.

GAS AND WATER PIPE PLATES WITH SOLID STEEL DIES.



No. 1 Screw Plate with right hand solid steel Dies	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	1 in.	\$18 each.
" 2 "	"	"	"	"	"
" 3 "	"	"	"	"	"
" 4 "	"	"	"	"	"

Extra Dies for No. 1 right or left hand \$2.50 each to order

"	2	"	4.25	"
"	3	"	4.75	"
"	4	"	5.00	"

Taps for the above

$\frac{1}{4}$ in.	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{8}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3 in.
\$1.12	1.25	1.50	1.87	2.50	3.12	3.75	4.62	6.25 10.50 15.00 each.

WHITWORTH'S IMPROVED SCREW STOCKS AND DIES.

With Taper, Plug, and Master Taps, imported to order.

AGENCY AND DEPOT

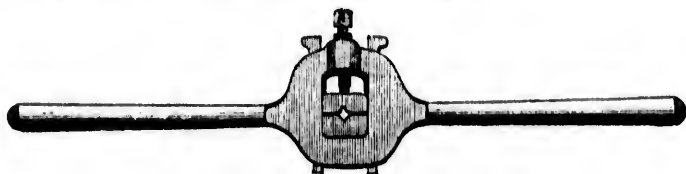
OF THE

STANDARD MACHINISTS STOCKS AND DIES, TAP WRENCHES,

Bee's Patent Volute Machinists Hand Taps,

**TAPER, PLUG AND BOTTOMING, LONG SHANK MACHINE OR NUT TAPS,
SOLID AND SHELL REAMERS, &c.**

These Tools are manufactured by the New-York Tap and Die Company, and are made of the very best Cast Steel. They are strongly recommended to machinists for *quality workmanship and accuracy to size, &c.* The Taps are warranted and should the consumer find any defect in temper will be exchanged for perfect Tools without extra charge.



SCREW PLATES AND DIES.

Size A	1	Screw Plate	3 sets Dies	$\frac{1}{4}$ to $\frac{1}{2}$ inch,	inclusive.....	each	\$5.00
"	B	1	"	4	"	$\frac{3}{8}$ to $\frac{1}{2}$ "	8.00
"	C	1	"	4	"	$\frac{1}{2}$ to $\frac{3}{4}$ "	10.00
"	D	1	"	4	"	$\frac{3}{4}$ to 1 $\frac{1}{2}$ "	13.00

Single sets of Dies for Plate A \$1.00 each. Plate B \$1.25 each. Plate C \$1.75 each. Plate D \$3.00 each.

NOTE.—The Screw Plates are priced with Dies, as per list, but without Taps.



PATENT ADJUSTABLE TAP WRENCHES.

To be used with the Taps and Reamers.

Size A	Fitting Taps	from $\frac{1}{4}$ to $\frac{1}{2}$ inch	diameter, inclusive.....	each	\$3.00
"	B	"	$\frac{1}{2}$ to 1 "	"	4.00
"	D	"	$\frac{3}{4}$ to 1 $\frac{1}{2}$ "	"	5.00

SMALL SCREW PLATE AND DIES.

For Model Makers and Jewelers use.

No. 1 with 5 Sets Dies and 5 Taps, cutting from $\frac{1}{4}$ to $\frac{1}{2}$ by 32 d's. \$5.25 each.
Patent Adjustable Tap Wrenches for ditto 2.25 "

VOLUTE TAPS, BEE'S PATENT.

MACHINISTS' TAPER TAP.



MACHINISTS' PLUG TAP.



MACHINISTS' BOTTOMING OR MASTER TAP.



MACHINISTS' HAND TAPS.					MACHINE OR NUT TAPS LONG SHANK.		
Taper, Plug and Bottoming.	Dia- meter.	No Threads to inch.	Price per set.	Price each.	Dia- meter.	No Threads. to inch.	Price each.
3 Taps to set.	1-4	20	\$1.50	\$.50	1-4	20	\$0.75
3 " "	5-16	18	1.65	.55	5-16	18	0.90
3 " "	3-8	16	1.84	.60	3-8	16	1.05
3 " "	7-16	14	2.10	.70	7-16	14	1.20
3 " "	1-2	12	2.40	.80	1-2	12	1.40
3 " "	9-16	12	2.70	.90	9-16	12	1.60
3 " "	5-8	11	3.00	1.00	5-8	11	1.80
3 " "	11-16	11	3.60	1.20	11-16	11	2.00
3 " "	3-4	10	4.20	1.40	3-4	10	2.25
3 " "	13-16	10	4.80	1.60	13-16	10	2.50
3 " "	7-8	9	5.40	1.80	7-8	9	2.87
3 " "	15-16	9	6.00	2.00	15-16	9	3.25
3 " "	1 inch.	8	6.75	2.25	1 inch.	8	3.63
3 " "	1 1-8	7	7.50	2.50	1 1-8	7	4.25
3 " "	1 1-4	7	9.00	3.00	1 1-4	7	4.88
3 " "	1 3-8	6	10.50	3.50	1 3-8	6	5.62
3 " "	1 1-2	6	12.00	4.00	1 1-2	6	6.75
3 " "	1 5-8	5	14.25	4.75	1 5-8	5	8.00
3 " "	1 3-4	5	16.50	5.50	1 3-4	5	9.25
3 " "	1 7-8	4 1/2	19.50	6.50	1 7-8	4 1/2	10.50
3 " "	2 inch.	4 1/2	22.50	7.50	2 inch.	4 1/2	12.00

NOTE.—The above is WHITWORTH'S Scale of Threads, others to order.

SOLID REAMERS.

Diameter.	Full Length of Reamers.	Length of Flutes.	Price each.
1-4	3 3-16 inches.	1 9-16 inches.	\$1.00
5-16	3 11-16 "	1 13-16 "	1.15
3-8	4 5-16 "	2 1-8 "	1.30
7-16	4 15-16 "	2 7-16 "	1.50
1-2	5 5-8 "	2 3-4 "	1.75
9-16	6 5-16 "	3 1-8 "	2.00
5-8	7 "	3 1-2 "	2.25
11-16	7 11-16 "	3 13-16 "	2.50
3-4	8 3-4 "	4 1-8 "	2.75
13-16	9 1-16 "	4 1-2 "	3.00
7-8	9 11-16 "	4 13-16 "	3.25
15-16	10 1-4 "	5 1-8 "	3.50
1 inch.	10 7-8 "	5 7-16 "	3.75
1 1-16	11 3-8 "	5 11-16 "	4.25
1 1-8	11 7-8 "	5 15-16 "	4.75
1 3-16	12 1-4 "	6 1-8 "	5.25
1 1-4	12 1-2 "	6 1-4 "	5.75
1 5-16	12 5-8 "	6 5-16 "	6.25
1 3-8	12 5-8 "	6 5-16 "	6.75
1 7-16	12 5-8 "	6 5-16 "	7.25
1 1-2	12 5-8 "	6 5-16 "	7.75
1 9-16	12 5-8 "	6 5-16 "	8.25
1 5-8	12 5-8 "	6 5-16 "	8.75
1 11-16	12 5-8 "	6 5-16 "	9.25
1 3-4	12 5-8 "	6 5-16 "	9.75
1 13-16	12 5-8 "	6 5-16 "	10.50
1 7-8	12 5-8 "	6 5-16 "	11.25
1 15-16	12 5-8 "	6 5-16 "	12.00
2 inch.	12 5-8 "	6 5-16 "	12.75

SHELL REAMERS.

Diamet.	Length.	Price.	Diamet.	Length.	Price.	Diamet.	Length.	Price.
1-2	2 1/2 inch.	\$1.25	1 1-16	3 1/2 inch.	\$1.75	1 5-8	3 1/2 inch.	\$3.85
9-16	"	1.25	1 1-8	"	2.00	1 11-16	"	4.20
5-8	"	1.25	1 3-16	"	2.00	1 3-4	"	4.55
11-16	"	1.25	1 1-4	"	2.25	1 13-16	"	5.00
3-4	2 1/2 "	1.50	1 5-16	"	2.50	1 7-8	"	5.50
13-16	"	1.50	1 3-8	"	2.75	1 15-16	"	6.10
7-8	"	1.50	1 7-16	"	3.00	2 "	"	6.80
15-16	"	1.60	1 1-2	3 1/2 "	3.25	2 1/2 "	4 "	11.50
1 inch	3 "	1.75	1 9-16	"	3.50	3 "	4 "	20.00

TWIST DRILLS.



AGENCY AND DEPOT



FOR THE

MORSE TWIST DRILL COMPANY'S TWIST DRILLS.

TAPER SHANKS.				TAPER SHANKS.			
AMERICAN STANDARD DRILLS.				AMERICAN STANDARD DRILLS.			
Diameter of Drills.	Entire Length of Drills.	Price each of Standard Taper Drill.	No. of Sockets for Standard Taper.	Diameter of Drills.	Entire Length of Drills.	Price each of Standard Taper Drill.	No. of Sockets for Standard Taper.
1-4	6	\$.55	1	31-32	11 1/4	\$3.35	4
9-32	6 1/4	.60	1	1	11 1/4	3.60	4
5-16	6 3/8	.65	1	1 1-32	11 3/8	3.75	4
11-32	6 7/8	.70	1	1 1-16	11 7/8	3.85	4
3-8	6 7/8	.75	2	1 3-32	11 3/4	4.05	4
13-32	7 1/4	.80	2	1 1-8	12	4.25	4
7-16	7 3/8	.85	2	1 5-32	12 1/4	4.45	5
15-32	7 7/8	.95	2	1 3-16	12 3/4	4.65	5
1-2	7 7/8	1.05	2	1 7-32	12 3/4	4.85	5
17-32	8 1/4	1.15	2	1 1-4	12 3/4	5.10	5
9-16	8 3/8	1.25	2	1 5-16	13 1/4	5.50	5
19-32	8 7/8	1.35	3	1 3-8	14 1/4	6.00	5
5-8	8 7/8	1.45	3	1 7-16	14 3/4	6.50	5
21-32	9 1/4	1.60	3	1 1-2	14 3/4	7.00	5
11-16	9 1/4	1.75	3	1 9-16	15 1/4	7.50	5
23-32	9 3/4	1.90	3	1 5-8	15 3/4	8.00	5
3-4	10	2.10	3	1 11-16	16	8.50	5
25-32	10 1/4	2.25	4	1 3-4	16 3/4	9.00	5
13-16	10 1/4	2.40	4	1 13-16	16 3/4	9.50	5
27-32	10 3/4	2.55	4	1 7-8	17 1/4	10.00	5
7-8	10 3/4	2.70	4	1 15-16	17 3/4	10.50	5
29-32	10 3/4	2.85	4	12	17 3/8	11.00	5
15-16	10 3/8	3.10	4				

The Standard Taper corresponds with the Manhattan Taper.

TWIST DRILLS.—Continued.

STRAIGHT SHANKS.				STRAIGHT SHANKS.			
TURNED DRILLS.				STUBS' STEEL WIRE GAUGE.			
Diameter of Drills.	Length in inches.	Price per Dozen.	Price each.	Numbers by Gauge.	Length in Inches.	Price per Dozen.	Price each.
1-16	2 $\frac{1}{2}$	\$1.10	10c	1 to 5	4	\$2.15	20c
5-64	2 $\frac{3}{8}$	1.20	11	6 " 10	3 11-16	2.05	19
3-32	2 $\frac{1}{2}$	1.30	12	11 " 15	3 $\frac{1}{2}$	1.95	18
7-64	2 $\frac{1}{8}$	1.50	14	16 " 20	3 $\frac{1}{4}$	1.85	17
1-8	3	1.65	15	21 " 25	3 1-16	1.75	16
9-64	3 $\frac{1}{8}$	1.85	17	26 " 30	2 13-16	1.60	15
5-32	3 $\frac{1}{4}$	2.00	18	31 " 35	2 $\frac{5}{8}$	1.45	14
11-64	3 $\frac{3}{8}$	2.25	20	36 " 40	2 7-16	1.30	13
3-16	3 $\frac{1}{2}$	2.50	21	41 " 45	2 $\frac{1}{4}$	1.20	12
13-64	3 $\frac{5}{8}$	2.75	24	46 " 50	2 1-16	1.10	11
7-32	3 $\frac{3}{4}$	3.00	27	51 " 65	1 $\frac{3}{4}$	1.10	10
15-64	3 $\frac{7}{8}$	3.30	30	No. 60 Stubs' W. G. is a size larger than 1-32 in. diam. " 56 " " is 3-64 No. 31 Stubs W.G. is 1-8 " 53 " " is 1-16 " 28 " " is 9-64 " 48 " " is 5-64 " 21 " " is 5-32 " 43 " " is 3-32 " 12 " " is 3-16 " 35 " " is 7-64 " 2 " " is 7-32			
1-4	4	3.60	32				
17-64	4 $\frac{1}{8}$	3.90	35				
9-32	4 $\frac{1}{4}$	4.20	37				
19-64	4 $\frac{3}{8}$	4.50	40				
5-16	4 $\frac{1}{2}$	4.80	42				
21-64	4 $\frac{3}{4}$	5.20	46	<p> Straight Shank Drills, Taper Lengths, at Taper Shank Prices, made to order.</p> <p>Drills of any size or length, with straight or Taper Shanks, made to order, and to fit any socket desired.</p> <p> The Standard Taper corresponds with the Manhattan Taper.</p>			
11-32	4 $\frac{5}{8}$	5.60	50				
23-64	4 $\frac{7}{8}$	6.10	54				
3-8	5	6.60	58				
25-64	5 $\frac{1}{8}$	7.00	62				
13-32	5 $\frac{1}{4}$	7.40	65				
27-64	5 $\frac{3}{8}$	7.70	69				
7-16	5 $\frac{1}{2}$	8.00	72				
29-64	5 $\frac{3}{4}$	8.40	75				
15-32	5 $\frac{5}{8}$	8.80	80				
31-64	5 $\frac{7}{8}$	9.20	84				
1-2	6	9.60	87				

PRICES PER SET OF STANDARD TWIST DRILLS.

Set Drills, Straight Shanks, 1-16 to $\frac{1}{2}$ inch, mounted, varying by 6ths	\$12.00
Set Drills, Straight Shanks, 1-16 to $\frac{1}{2}$ inch, mounted, varying by 32nds	6.00
Set Drills, from $\frac{1}{16}$ to $\frac{1}{2}$ inch, mounted, with ends of Drills larger than 5-16 in turned to fit 5-16 Chucks	10.00
Set Drills, Steel Wire Gauge, from 1 to 60, mounted	8.00
Half Set Drills, Steel Wire Gauge, alternate Nos from 1 to 60, mounted	4.50
Jeweler's Set Drills, neatly mounted in a Mahogany case with cap, containing 39 Drills, from No. 39 ($\frac{1}{4}$ inch) to No. 65, Steel Wire Gauge	5.00
Set of Three Steel Sockets, to hold Drills from $\frac{1}{4}$ to $\frac{1}{2}$ inch	7.00
One large Steel Socket to hold Drills from 1 5-16 to 2 inch diameter	4.00



BIT STOCK DRILLS.

Dia. of Drill.	Price Each.	Price Per Doz.	Price Per Gross	Dia. of Drill.	Price Each.	Price Per Doz.	Price Per Gross.
1-16	15 cts.	\$1.60	\$19.20	1-4	\$0.40	\$4.50	\$54.00
3-32	17 "	1.75	21.00	5-16	0.50	5.75	69.00
1-8	22 "	2.25	27.00	3-8	0.65	7.75	93.00
5-32	26 "	2.75	33.00	7-16	0.85	10.00	120.00
3-16	30 "	3.25	39.00	1-2	1.05	12.50	150.00
7-32	35 "	3.75	45.00				

Price per set, 1-16 to $\frac{3}{8}$ inch, boxed, \$2.80.

These Bit Stock Drills will fit all the braces now in the market, and will drill Steel, Iron, or other Metals, as well as Wood. For Carriage Makers, Pattern and Model Makers, and, in fact, for all Workers in Wood, they are unsurpassed, as they sustain no injury by boring against screws or nails, and will bore any kind of Wood without splitting with greater rapidity than the ordinary Bit or Gimlet.

All sizes from 1-16 to $\frac{1}{2}$ in. kept in stock.—They vary in length from $3\frac{1}{2}$ to 7 inches (over all) according to size.

PATENT TWIST DRILL GRINDING MACHINES.

No. 1, for grinding Drills of sizes below one half inch. Price,....\$10.00

No. 2, for sizes varying from three-eighths to two inches. Price,..\$20.00

Extra rests for grinding left hand Drills, furnished for \$2.50 and...\$5.00

By removing the rest, the Machine may be used for an Emery Grinder.

Extra Wheels furnished at the lowest rates. See list on page 53

Beach Patent Self-Centering and Self-Tightening Drill Chuck.



No. 0 holds Drills from 0 to 1-8 in. diameter,..... \$7.00 each.

No. 1 " " " 0 to 3-16 in. " 9.00 "

No. 2 " " " 0 to 3-8 in. " 10.00 "

No. 3 " " " 0 to 1-2 in. " 14.00 "

Warwick Patent Drill Chucks.

No. 1 holds Drills from 0 to 3-8 in.,.....\$4.00 each.

No. 2 " " " 5-16 to 3-4 in.,..... 8.00 "

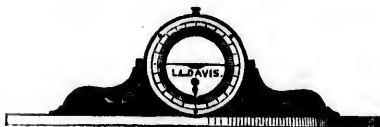
See cut at end of this book.

PATENT ADJUSTABLE SPIRIT LEVEL, PLUMB AND INCLINOMETER.

UNEQUALLED IN ACCURACY, DURABILITY AND SIMPLICITY.

Patented in the United States, England and France.

No. 1. 6 INCH.



Nos. 2, 3 & 4,

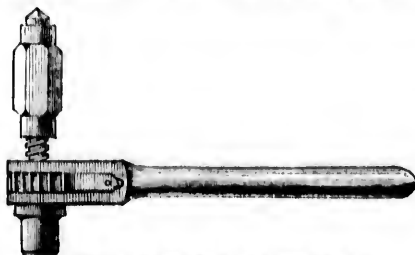
**IRON STOCKS.**

No. 1—6 in.	No. 2—12 inch.	No. 3—18 in.	No. 4—24 in.
\$2.50	4.00	5.00	\$5.50 each.

MAHOGANY STOCKS.

18 in.	24	30 in.
\$3.50	4.00	\$4.50 each.

These Levels are of the best material and workmanship and have been thoroughly adjusted and tested. They are the most accurate and convenient ever brought out, and are fully recommended to machinists and others having use for either a LEVEL, PLUMB or INCLINOMETER.

RATCHET BRACES.**SINCOKOS PATENT RATCHET BRACES.**

The best and cheapest in the Market combining simplicity and durability

12 in.	14	16	18	20 in.
\$4.00	4.50	5.00	5.50	\$6.00

WESTONS PATENT DIFFERENTIAL RATCHET BRACES.

12 in.	14	16	18	20 in.
\$5.00	5.50	6.00	6.50	\$7.50

FINE STANDARD MACHINISTS TOOLS.

EMBRACING

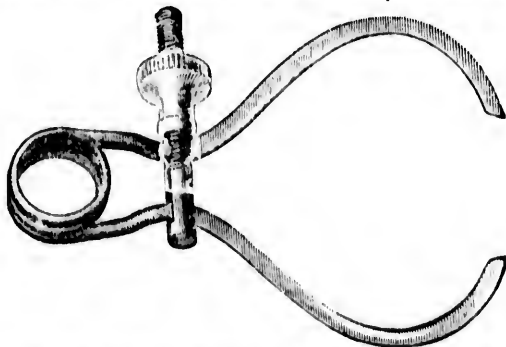
Calipers, Compasses, Rules, Levels, Squares, Scales,
Gauges, &c.

These Tools are manufactured by STEVENS & CO., BEMIS, CALL & CO., DARLING, BROWN & SHARP, L. DAVIS, &c. We keep in stock an assortment of them as per following list :

FINE POLISHED CAST STEEL SPRING CALIPERS assorted sizes.

"	"	"	Dividers	"	"
"	"	"	Winged Compasses	"	"
"	"	"	Plain	"	"
"	"	"	Winged Calipers	"	"
"	"	"	Double	"	"
"	"	"	Inside and outside ditto	"	"
"	"	"	Calls patent inside	"	"
"	"	"	Caliper Squares Single		
"	"	"	Double Slide.		

PATENT HELICAL SPRING CALIPERS.



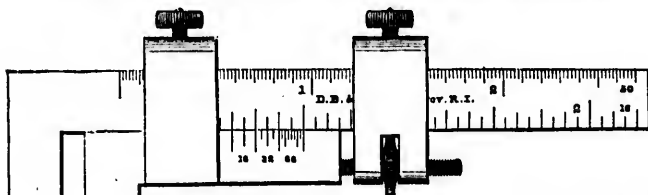
This is a new article, finely finished and made of extra Cast Steel.—8 sizes from 1 to 6 inches.

Price, 1, 1½, 2, 2½ and 3 inch.....\$8.00 per doz.

" 4, 5, and 6 inch..... 10.00 "

~~10~~ The 1 inch are intended to be worn on watch guards, they are quite perfect.

POCKET VERNIER CALIPERS.

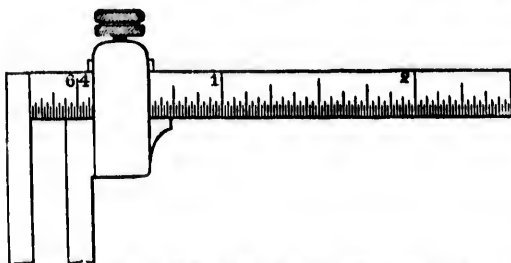


HARDENED CAST STEEL POCKET VERNIER CALIPER, with adjusting Screws, divided on one side to 50ths and the other to 64ths of an inch. Price \$6.00 each.

Ditto	ditto	In Morocco Case \$7.00 each.
Ditto	ditto	but without the adjusting Screws. \$5.00
Ditto	ditto	In Morocco Case \$6.00 each.

IMPROVED VERNIER CALIPER, with adjusting Screw. This instrument is furnished with both inside and outside Calipers and points to transfer the distance with dividers. It reads to thousandths of an inch. An explanation of the Vernier accompanies each.

Price in Morocco Case, 6 in. \$18.00. 12 in. 25.00. 24 in. \$30.00 each.



CALIPER SQUARES, fine Steel, marked to 64ths.

Price 2 in. \$2.50. 4 in. \$4.50 each.



STEEL CALIPER RULES, marked to 64ths and 100ths.

Price \$4.00 each.

Steel Marking Gauges.

" back Squares 3 to 6 inch.

" Squares plain and marked 2 and 2½ inch.

AMES PATENT UNIVERSAL SQUARE, - combining, in the most convenient form, *five different instruments*.

6 inch.

8 inch.

10 inch.

\$3.00

\$4.00

\$5.00 each.

Hardened Cast Steel T. SQUARE, and universal BEVEL \$6.00.

CENTER GAUGE and GAUGE for grinding and setting Screw Tools, 50 cents each.

STEEL WIRE GAUGES, Old and New Standards.

SCREW GAUGES, for wood Screws. \$2.50 each.

POCKET SHEET METAL GAUGE, graduated to thousandths of an inch. \$5.00. In Morocco Case \$5.50 each.

PATENT CUTTERS for Teeth of Gear Wheels. Various sizes and prices.

BEVELLED STEEL STRAIGHT EDGES.

12 × 1½

18 × 1½

24 × 2

36 × 3

48 × 3

\$2.50 each.

3.00

4.00

9.00

\$12.00 each.

STANDARD STEEL RULES, various graduations (English) to 64ths and 100ths of an inch.

2

3

4

6

12

18

24 inch.

40c.

50

75

\$1.00

2.00

3.00

4.00 each.

FRENCH STANDARD Steel Rules. 6 sizes.

STEEL SHRINKAGE RULES, "Single" or "Double," and "Single and Double" Shrink. Price \$3.00, 3.50 and 4.50 each.

STEEL RULES, Shrinkage Scale on one side and Standard on the other.

TRIANGULAR SCALES, Silver plated, finely graduated for Architects, Engineers and Mechanical Draughtsmen. 6 graduations \$6.00 each.

TRIANGULAR BOX-WOOD, ditto ditto.

Various graduations, 6 inch.

12

24 inch.

\$1.50

2.00

\$5.00 each.



TRIANGULAR STEEL RULES, various graduations, 4 sizes.

3

4

6

12 inch.

60c

80

\$1.20

\$3.00 each.



SQUARE STEEL RULES, various graduations, 3 sizes.

3

4

6 inch.

50c

75

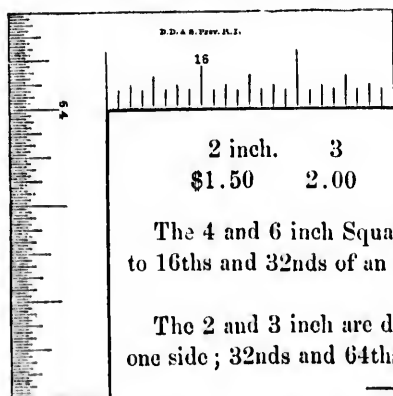
\$1.00 each.

PATENT HARDENED CAST STEEL TRY SQUARES for Machinists.
11 sizes, $1\frac{1}{2}$ to 36 inch. \$2.50 to \$15.00 each.

PATENT HARDENED TRY SQUARES for Wood Workmen.

4	6 $\frac{1}{2}$	9 $\frac{1}{2}$	12 inch.
\$3.00	4.00	6.00	\$8.00 each.

THIN STEEL SQUARES for Machinists and Draughtsmen.



2 inch.	3	4	6 inch.
\$1.50	2.00	2.50	3.50 each.

The 4 and 6 inch Squares are divided on both sides to 16ths and 32nds of an inch.

The 2 and 3 inch are divided to 16ths and 64ths on one side; 32nds and 64ths on the other.

OPEN STEEL TRIANGLES for Draughtsmen, at angles of 30, 45, 60, and 90 Degrees

Large size	\$4.50 each.
Small size	3.50 "

COMBINED GAUGE AND CALIPER graduated 16ths, 32nds and 64ths of an inch. \$5.00 each.

SURFACE GAUGE, a very useful instrument. Price \$3.50 each.

BEVEL PROTRACTOR. Price \$6.00 each.

STEEL SQUARES FOR MILLWRIGHTS, very accurate 24 x 18 divided to 8ths, 16ths 32nds and 64ths of an inch. \$6.00 each.

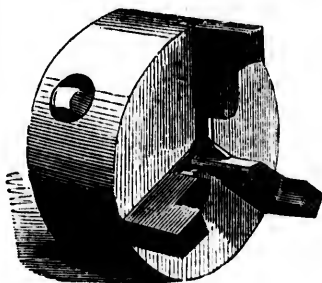
BEECHE'S PATENT SCREW CUTTING AND LATHE TOOL.

IMPROVED CYLINDER OR GAS PIPE WRENCHES.

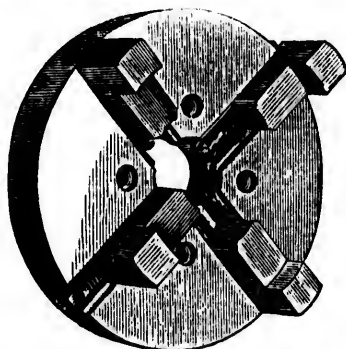
10 inch,	12	15	18 inch.
\$2.00	2.25	3.25	4.00 each.

Illustrated Price Lists of all the foregoing Tools, with prices affixed (giving details) furnished post free on application to us.

CUSHMANS PATENT IMPROVED DRILL AND LATHE CHUCKS.



**Universal Geared Scroll
Chuck.**



**Independent Jaw Screw
Chuck.**

UNIVERSAL GEARED SCROLL CHUCKS.

3 inch.	4	5	6	9 inch.
\$12.00	15.00	17.00	20.00	\$25.00 each.

INDEPENDENT JAW SCREW CHUCKS.

3 or 4 Jaws.

9 inch.	12	15	20	24 inch.
\$30.00	35.00	45.00	60.00	75.00 each.

ALSO

CUSHMANS LEVER SCROLL CHUCKS, CENTERING AND DRILLING CHUCKS,
CENTERING MACHINES, &c., &c.

CUSHMANS UNIVERSAL HOLLOW AUGERS.

Price \$6.00 each.

Will cut any size tenon, from 3-8 to 1 1-2 inch, working equally
well for every size.

(See cut at end of this Book.)

ALSO IMPORTED TO ORDER

BROWN & SHARP'S MACHINES & TOOLS, Viz:

MILLING MACHINES, Universal, Plain, &c. SCREW MACHINES, SLOTTING and
TAPPING MACHINES, DIE HOLDERS, FRICTION CLUTCH PULLEYS, PULLEYS for
OVERHEAD WORK, CUTTERS for GEAR WHEELS. WATCH CLOCKS for FACTORIES,
&c., &c.—*Price lists furnished.*

THE GODDARD SOLID EMERY WHEEL.

These Wheels are entirely free from any *offensive smell*, will not *glaze or heat*, cut faster than any other wheels, and will not burst at any ordinary rate of speed.—They are the best in the market. In all cases they should be run with *Flanges and should not be forced upon the arbor*.

They can be had of assorted numbers of Emery, viz :—from No. 3 to 120 and Flour.

Diameter of Wheels in Inches.	THICKNESS OF WHEELS IN INCHES.							No. of Revolutions per minute.
	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	
$1\frac{1}{2}$	\$0.40	\$0.45	\$0.50	\$1.60	\$0.70	\$0.80	\$0.90	14,400
2	0.50	0.55	0.62	0.74	0.86	0.93	1.10	10,800
$2\frac{1}{2}$	0.70	0.78	0.85	1.00	1.15	1.30	1.45	8,640
3	0.85	0.93	1.10	1.35	1.60	1.85	2.10	7,200
4	1.10	1.37	1.65	2.20	2.75	3.30	3.85	5,400
5	1.40	1.80	2.20	3.00	3.80	4.60	5.40	4,300
6	1.75	2.40	3.05	4.35	5.65	7.00	8.25	3,600
7	2.30	3.13	3.95	5.00	7.25	8.90	10.55	3,090
8	2.60	3.55	4.50	6.40	8.30	10.20	12.10	2,700
9	3.15	4.38	5.60	8.05	10.50	12.95	15.40	2,400
10	3.70	5.15	6.60	9.50	12.40	15.30	18.20	2,160
12	4.00	5.68	7.35	10.70	14.05	17.40	20.75	1,800
14	6.20	8.45	10.70	15.20	19.70	24.20	28.70	1,510
16	8.00	10.85	13.70	19.40	25.10	30.80	36.50	1,350
18	9.50	13.25	17.00	24.50	32.00	39.50	47.00	1,200
20	11.00	15.50	20.00	29.00	38.00	47.00	53.00	1,080
22	13.00	18.65	24.25	35.50	46.75	58.00	69.25	1,000
24	15.00	22.00	29.00	42.00	55.00	70.00	84.00	900

PATENT EMERY GRINDERS, designed expressly for running the solid Emery Wheels, are made in three sizes viz :—

No. 1 for wheels 2 to 10 inch in diameter by $\frac{1}{2}$ to 2 inch face.

No. 2 for wheels 4 to 16 inch diameter by $\frac{1}{2}$ to 3 inch face.

No. 3 is a heavy machine and will run wheels 10 to 24 inch diameter by $\frac{1}{2}$ to 4 inch face.

DIAMOND TOOLS for truing Emery Wheels.....\$15.00 each.

PARALLEL VICES.



STEPHENS VICE.



BACKUS VICE.

STEPHENS' PATENT PARALLEL VICES.

These are made on a new principle, *with a lever and toggle*—and are recommended as first class vices.

Width of jaw,	2 $\frac{3}{4}$,	3 $\frac{1}{2}$,	4 $\frac{1}{2}$ inches.
Price without swivel,	\$5.50	9.00	\$12.50 each.
Price with swivel,	6.50	10.50	14.50 "

BACKUS' PATENT PARALLEL VICES.

The jaws of these vices are faced with Hardened Steel, welded to Iron. This is one of the best tools in the market.

Width of Jaw,	3,	3 $\frac{1}{2}$,	4,	4 $\frac{1}{2}$,	5 inches.
Price without seat, \$	7.50	9.50	10.75	13.00	\$17.50 each.
Price with seat	8.50	10.50	12.00	14.50	19.00 "



PATENT PIPE VICES.

These vices have an extra jaw, with corrugated grooves, by which pipes of any size may be firmly held without injury to them. The *Extra Jaw* may be removed in a moment when the vice is wanted for other work.

Prices,	1 $\frac{1}{2}$,	4,	6,	8 inches.
	\$5.00	17.50	23.00	\$33.00 each.

NAGLES PATENT EXPANDING MANDRELS, viz:

NUT AND PLAIN MANDRELS—17 sizes: from $\frac{1}{2}$ to 1 in., by sixtenths of an inch; from 1 in. to 2 in. by eighths of an inch. Prices from \$2.50 to \$13.00 each.

These Mandrels are made entirely of Steel and are first class articles.

In ordering them, state distinctly the size and length of shell: and for nut Mandrels, also the number of threads per inch, and form of thread.

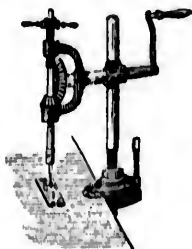
Price Lists and other information supplied on application to us.

CRUTCHLEYS PATENT EXPANDING TOOLS for Reaming, Drilling, Boring, and Tapping, 12 sizes, $\frac{3}{4}$ to $4\frac{1}{2}$ inch.

DUDGEONS TUBE EXPANDER, 16 sizes, 1 to 7 inch.

CHRISTOFFELS PATENT TUBE SCRAPER, assorted sizes, 2 to 6 inches.


HOLLAND & CODY'S PATENT UNIVERSAL ANGULAR DRILLING MACHINES.



- | | |
|--|---------|
| No. 1, Upright Shaft, $1\frac{1}{2}$ inch in diameter, 20 inch long, weighs 25 lbs, will drill a $\frac{3}{4}$ inch hole..... | \$34.00 |
| " 2, Upright Shaft, $1\frac{1}{2}$ inch in diameter 24 inch long, weighs 46 lbs, will drill a $\frac{3}{4}$ inch hole..... | 33.00 |
| " 3, Upright Shaft, 2 inch in diameter, 27 inch long, weighs 94 lbs, will drill a $1\frac{1}{4}$ inch hole, geared back, $\frac{1}{2}$ | 65.00 |
| " 4, Upright Shaft, same size as No. 2, geared back $\frac{1}{2}$, so as to drill an inch hole | 38.00 |

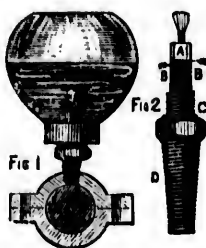
The Patent Angular Drilling Machine is one of the most simple and useful inventions of the age.

It is the only tool that will drill or bore holes at any conceivable angle and is superior to any hand or light power drill in use.

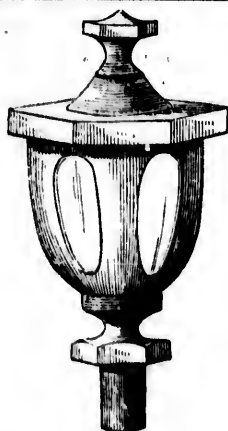
 These Machines are invaluable to all persons using *Twist Drills*.



No. 3.



Cut Showing Plan
of the
Patent Oilers



No. 14.

HOLLAND & CODY'S PATENT SELF OILERS.

	Diam.	Height,	Per doz.
No. 0, Flat for Narrow Space (1 inch) Plain Stems 1 in. x 2	2½	2½	\$9.00
" 1, For Shafting, Plain Stems	2½	3½	6.00
" 2, Small Shafting, Carding Machines Spinning Frames, Screw Stems	1½	2½	9.00
" 3, Ordinary and Counter Shafting, Screw Stems,...	2½	2½	9.00
" 4, Upright Shafting and Wall Box Bearings, Oblique	2½	3½	12.00
" 5, Loose Pulleys	1½	2½	12.00
" 6, Large Shafting	3½	4½	18.00
" 7, Suitable for Bearings where cup is required to be filled and regulated from top	1½	2½	15.00
" 8, " " " " " "	2½	3½	18.00
" 9, " " " " " "	3	5½	24.00
" 10, For Stationary or Marine Engines	1½	2½	10.00
" 11, " " " " " "	2½	3½	24.00
" 12, " " " " " "	3	4½	30.00
" 13, " " " " " "	3½	6½	60.00

LOCOMOTIVE OILERS.—With Brass Casing, keeping the Oil exposed to view.

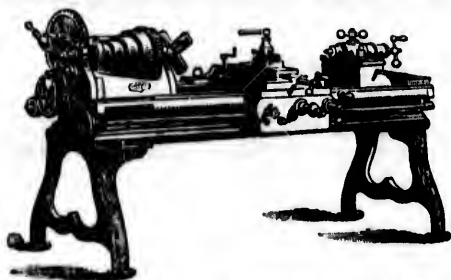
No. 14, For Small Connections	1½	2½	24.00
" 15, " Guide Bars and Connection Rods	2½	4	36.00
" 16, Suitable for Shafting &c., filled from the top,...	2½	3½	15.00

For cuts of 4, 5, 7, 8, 9, 10, see end of this book.

AUTOMATIC LUBRICATORS.—For Cylinders of Engines.

These Oilers are filled with melted tallow or oil. They contain no side valves or ground joints for expansion or contraction to destroy the Oiler; and are the most simple and durable Lubricators ever invented.

Inches in Diameter, 1	1½	2	2½	3	3½	4
Price, each	\$3.00	5.00	7.00	9.00	11.00	13.00
						\$15.00



FITCHBURG MACHINE COMPANY,

MANUFACTURERS OF

IMPROVED MACHINISTS TOOLS, &c.,

We are Agents for, and import to order at Manufacturers prices, the Tools manufactured by this Company, consisting in part of the following, viz :

ENGINE LATHES, 17 sizes, to turn from 3 feet 6 to 13 feet.

HAND LATHES, 6 sizes, 3 feet to 10 feet Bed.

SPEED LATHES, one size.

CHUCKING LATHES, 4 sizes.

PATTERN MAKERS LATHES, of various lengths of Bed.

CAR AXLE LATHE, 11 feet Bed, &c., &c.

SLIDE OR COMPOUND VICES, 3 sizes, 8, 12 and 16 inches.

STRAIGHTENING MACHINES, 2 sizes, No. 1 for Shafts to 3 inches, No. 2 for Shafts to 5 inches.

IRON PLANERS, 21 sizes, from 5 feet \times 22 \times 21 in. to 24 feet \times 50 \times 48 inches.

PLANER CENTER, with Circular index, 10, 16, 24 inches.

WARRENS PAT: PLANER CHUCKS, 4 sizes, 10, 12, 15, 18 inches.

MILLING MACHINES, designed for Sewing Machine Work, &c.

MERRIMANS PATENT BOLT CUTTERS, 3 sizes, No. 1, 2, 3.

SHAPING MACHINES, 3 sizes, Nos. 1, 2, 3.

UPRIGHT DRILLS, 6 sizes Nos. 0 to 5.

TRANSVERSE DRILLS, 2 sizes, Nos. 1 and 2.

HORIZONTAL BORING MILLS, 3 sizes, 12, 14 and 16 feet Bed.

WILDERS PATENT SHEARING MACHINES FOR WOOLLEN FACTORIES, 7 sizes, to shear from 40 inch. to 34 inch., with 9 to 16 Cutters. Prices \$160.00 to \$300.00.

All the above Machines and Tools, are of the latest and most improved kind and are warranted to give entire satisfaction. PRICE LISTS and other information supplied on application to us.

WE ARE AGENTS FOR AND IMPORT TO ORDER

SMITH'S PATENT WOOD WORKING MACHINERY.

CONSISTING IN PART OF

No.	1,	Moulding Machine, Improved, with upper and under feed rolls, for Mouldings, Planing and Matching Floorings, Sheathing, &c., &c.	Price to cut 3 sides.	\$400
"	1,	" " "	to cut 4 sides.	450
"	1½,	" " "	" 3 " "	400
"	2,	Moulding Machine, for Sticking Sash, Small Mouldings, Planing and Rounding Blind Slats, &c., &c., to cut 3 sides.	Price	225
"	2,	" 4 " "	Price	255
		Combined Moulding, Planing and Matching Machine, 12 in. Moulder, 3 sides.....		675
		12 " " 4 "		750
No.	2,	Tenoning Machine, Single Head, without cope.....		200
"	2,	" " " " with one cope.....		215
"	2,	" " " " with two copes....		223
"	2,	" " Double Head, with two copes....		239

Extra Heads and Cutters for the above can be furnished at the following Prices, viz :—

Panel Raising Heads.....	\$8.00 each.	Cutters...3.00
Grooving Heads.....	8.00 "	Cutters...3.00
Extra 2 $\frac{1}{2}$ in. Capped Heads	7.50 "	Cutters for
Sticking Blind Slats.....		\$3.00 each.

No. 3,	Improved Sash and blind Tenoning Machine without cope	\$170
" 3,	" " " " with cope ..	185
" 4,	Foot Mortising Machine	38
" 3,	Power Mortising " (medium)	150
" 2,	" " " (large)	188
" 1,	" " " (extra large)	750

* This is a very strong and powerful Machine.

Blind Stile Mortiser.....	\$100
Self operating Blind Stile Boring Machine.....	100
Horizontal Boring Machine.....	125
Improved Surfacing Machine, including Countershaft, Hangers and Pulleys, Single Belted, 16 inch.....	225
" " " Double " 20 " 	275
" " " " " 24 " 	300
" " " " " 28 " 	500
Heavy Re-Sawing Machine, 22 in. saw.....	250
" " " 24 " 	250
" " " 30 " 	275
" " " 36 " 	300

Gray & Wood's Patent Dimension Planer for Truing out Timber, Plank or Boards.

N. B.—A small charge is made for Packing or Boxing these Machines.

These Machines are the very best made; warranted to give entire satisfaction. They have been exhibited at several Fairs (*eleven*) in the United States, never failing in a single instance to take the highest premiums. We have sold several of them to parties in this city and elsewhere to whom we can refer for testimonials, if required.

All orders must be addressed to us.

FOOT MORTISING MACHINES.

COMPLETE WITH 3 CHISELS $\frac{3}{8}$ TO $\frac{5}{8}$ INCH.

Price \$16.00 and \$20.00 each.

These machines are well made, having the face plates planed up, and all the bearings and joints carefully fitted.

WAREHOUSE TRUCKS.

HALF IRONED.

No. 1, \$6.00

No. 2, \$7.00 each.

FULL IRONED.

No. 1,

2,

3,

\$8.00

9.00

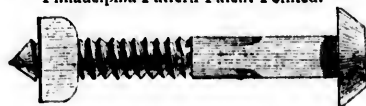
\$12.00 each.

The *Half Ironed* will be found very convenient and quite strong enough for ordinary work.

The *Full Ironed* and extra strong for heavy work; both kinds are made of well seasoned timber and carefully ironed.

BEST BRIGHT WATER TURNED CONE HEAD CARRIAGE BOLTS AND NUTS.

Philadelphia Pattern Patent Pointed.

*Are made up expressly for ourselves from Best Best Refined Iron.***1-4 INCH.**

1	1½	1½	1¾	2	2½	2½	2¾	3 inch.
\$2.00	2.00	2.00	2.05	2.10	2.15	2.20	2.25	2.30 per 100
3½	3½	3¾	4	4½	4½	4¾	5	6 inch
\$2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.75	3.25 per 100

5-15 INCH.

1½	1¾	2	2½	2½	2¾	3	3½	3½ inch
\$2.35	2.40	2.45	2.53	2.60	2.68	2.75	2.82	2.90 per 100
3¾	4	4½	4½	5	5½	6	7	8 inch.
\$2.97	3.05	3.12	3.20	3.35	3.50	3.65	4.25	4.75 per 100

3-8 INCH.

2	2½	2½	2¾	3	3½	3½	3¾	4 inch.
\$3.40	3.52	3.63	3.74	3.85	3.93	4.08	4.20	4.30 per 100
4½	4½	5	5½	6	6½	7	8	9 inch.
\$4.41	4.53	4.75	4.93	5.20	5.43	5.65	6.20	6.85 per 100

7-16 INCH.

2	2½	3	3½	3½	3¾	4	4½	5 inch.
\$4.80	5.10	5.40	5.55	5.70	5.85	6.00	6.30	6.60 per 100
5½	6	6½	7	7½	8	8½	9	10 inch.
\$3.90	7.20	7.50	7.80	8.10	8.40	8.70	9.00	9.00 per 100

1-2 INCH.

2	2½	2½	2¾	3	3½	4	4½	5 inch.
\$7.20	7.40	7.60	7.80	8.00	8.40	8.80	9.20	9.60 per 100
5½	6	6½	7	7½	8	9	10	10 inch.
\$10.00	10.40	10.80	11.20	11.60	12.00	12.80	13.60	13.60 per 100

5-8 INCH.

4	4½	5	5½	6	7	8	9	10 inch.
\$14.50	15.25	16.00	16.75	17.50	19.00	20.50	22.00	23.50 per 100

BEST TIRE BOLTS AND NUTS.**3-16 INCH.**

1½	1½	1¾	2	2½	2½	2¾	3	3½ inch.
\$1.10	1.13	1.15	1.20	1.25	1.30	1.35	1.40	1.45 per 100

1-4 INCH.

1½	1½	1¾	2	2½	2½	2¾	3	3½ inch.
\$1.15	1.15	1.20	1.25	1.30	1.35	1.40	1.45	1.50 per 100

5-16 INCH.


1½	1¾	2	2½	2½	2¾	3	3½	3½ inch.
\$2.00	2.05	2.10	2.18	2.25	2.33	2.40	2.48	2.55 per 100

COACH SCREWS.



BEST PATENT GIMLET POINTED SQUARE HEAD COACH SCREWS.

$1\frac{1}{2}$ in. $\times \frac{1}{4}$	$1\frac{1}{2} \times 5-16$	$1\frac{3}{4} \times \frac{3}{8}$	$2 \times \frac{1}{4}$	$2 \times 5-16$	$2 \times \frac{3}{8}$	$2\frac{1}{2} \times \frac{3}{8}$ inch.
80c.	1.00	1.30	1.10	1.30	1.50	1.60 p. 100
3 in. $\times \frac{3}{8}$	$3 \times \frac{1}{2}$	$3\frac{1}{2} \times \frac{3}{8}$	$3\frac{1}{2} \times \frac{1}{2}$	$4 \times \frac{3}{8}$	$4 \times \frac{1}{2}$	$4 \times \frac{5}{8}$
\$2.00	2.80	2.20	3.00	2.50	3.20	4.50 5.50 4.00 p. 100
$4\frac{1}{2}$ in. $\times \frac{3}{8}$	$4\frac{1}{2} \times \frac{5}{8}$	$5 \times \frac{1}{2}$	$5 \times \frac{5}{8}$	$5 \times \frac{3}{4}$	$6 \times \frac{1}{2}$	$6 \times \frac{5}{8}$
\$3.25	4.50	4.50	5.00	6.00	5.00	6.00 7.00 p. 100
7 in. $\times \frac{5}{8}$	$7 \times \frac{3}{4}$	$8 \times \frac{3}{4}$	$9 \times \frac{3}{4}$	$10 \times \frac{3}{4}$ inch.		
\$7.00	7.50	8.00	9.00	10.00 p. 100		

 Special attention is called to the improved thread cut on these Coach Screws.

STOVE, RANGE AND FURNACE BOLTS AND NUTS.



1-4 INCH IRON.

$\frac{3}{4}$ inch.	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 inch.
70c.	75	80	85	90	\$1.00	1.10 per 100

PLOW BOLTS WITH SQUARE OR ROUND COUNTERSUNK HEADS.

3-8 INCH IRON.

$1\frac{1}{4}$ inch.	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$ inch.
\$2.20	2.30	2.40	2.50	2.75	3.00 per 100

ELEVATOR BOLTS.

(For bolting Buckets to Grain Elevators.)

$\frac{3}{4} \times 3-16$ inch.	$1 \times \frac{1}{4}$ inch.
\$1.80	\$2.50 per 100

ALSO

Gimlet Pointed Wood Screws, Iron, Brass and Japanned,—Hand Rail Screws, Saw Screws, &c.

And imported to order

Machine Bolts and Screws, Cup and Set Screws, Carriage Spring Bolt Ends, &c. &c.

ST. PAULS WORKS.

WROUGHT IRON WASHERS.

WE MANUFACTURE AND KEEP IN STOCK A SUPPLY OF
WASHERS AS UNDER.

Size of Hole.		Outside Diameter,		Thickness by Wire Gauge.				
1-4	inch.	x	1-2	inch.	x	16	W. G.	
5-16	"	x	5-8	"	x	15	"	
3-8	"	x	7-8	"	x	14	"	
7-16 & 1-2	"	x	1	& 1 1-8	"	x	13	"
9-16 & 5-8	"	x	1 1-4	& 1 3-8	"	x	12	"
11-16	"	x	1 1-2	"	x	11	"	
3-4 & 13-16	"	x	1 3-4	"	x	11	"	
7-8 & 1	"	x	2	"	x	10	"	
1 1-8	"	x	2 1-4	"	x	9	"	
1 1-4	"	x	2 1-2	"	x	9	"	
1 3-8 & 1 1-2	"	x	2 3-4 & 3	"	x	8	"	

Price,	1 1-2 to 5-8 inch	.....	7	cents per lb.
"	9-16 to 1-2	"	8	" "
"	7-16 to 3-8	"	11	" "
"	1-4	"	13½	" "

Put up in Boxes of 50 lbs.

STEEL, BRASS, COPPER AND ZINC WASHERS of
above sizes made to order. Also all kinds of COLD CUT WORK
and PUNCHING to order, on furnishing patterns or drawings.
Washers are exact to size. In ordering please give diameter of hole,
and note that they should be 1-16 in. larger than the bolt for which
they are intended.

BEST WROUGHT IRON NUTS.

SQUARE NUTS.

1-4 in. 5-16, 3-8, 7-16, 1-2, 9-16, 5-8 3-4 in. and upwards.
17c. 13 9 8 7 6½ 6 6 cts. per lb.

HEXAGON NUTS.

1-4 in. 5-16, 3-8, 7-16, 1-2, 9-16, 5-8, 3-4 in. and upwards.
40c. 30 17 12 10 9½ 9 8 cts. per lb.

NOTE.—These NUTS are smaller than size, being made to suit BOLTS of
sizes given on list.

SUPERIOR QUALITY AXLES.

WARRANTED.

SOLID COLLAR.—Warranted.		$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$
No. 1, Com. Taper Plain Nuts,.....	Short Siks.	3.00	3.00	3.00	3.30	3.75	4.40
" 2, " " " " " " " " " "	Long " "	4.00	4.00	4.50	4.80	5.75	6.55
" 3, Half Patent " " " " " " " "	Short " "	3.30	3.30	3.30	3.65	4.35	5.05
" 4, " " " " " " " " " "	Long " "	4.30	4.30	4.80	5.15	6.35	7.15
" 5, Com. Taper Recess Nuts,.....	Short " "	3.30	3.30	3.30	3.60	4.10	4.80
" 6, " " " " " " " " " "	Long " "	4.40	4.40	4.90	5.25	6.28	7.00
" 7, " Half Patent " " " " " " " "	Short " "	3.00	3.00	3.00	4.00	4.75	5.50
" 8, " " " " " " " " " "	Long " "	4.70	4.70	5.25	5.65	7.00	7.80
<i>Swelled Taper and Swelled Half-Patent Solid Collar, with Grooves and Oil Chambers.</i>							
No. 9, Swelled Taper,.....	Short Siks.	4.50	4.50	4.50	5.25	6.25	7.50
" 10, " " " " " " " " " "	Long " "	7.00	7.00	7.00	8.25	9.25	10.50
" 11, " Half Patent,.....	Short " "	4.50	4.50	4.50	5.25	6.25	7.50
" 12, " " " " " " " " " "	Long " "	7.00	7.00	7.00	8.25	9.25	10.50

Long Arm Axles, 1 to 3 inches..... $7\frac{1}{2}$ cts. per lb.

In ordering, please give the No. of Axles on the list, so as to avoid mistakes.

Patent Seamless Thimble Skeins, or Waggon Arms, assorted sizes.

CARRIAGE SPRINGS.

These Springs are made from the best English Steel, and every Spring is subjected to a severe test to prove its quality.

Elliptic Springs Bright, $1\frac{1}{4}$ inch $14\frac{1}{2}$ cts. per lb." " " " $1\frac{1}{2}$ " and larger....13 " lb

Side Springs same price as the Elliptic.

Sulky Springs, $1\frac{1}{4}$ inch.....\$3.00 per pair." " $1\frac{1}{2}$ " 3.50 "

Seat Springs, single..... 2.75 "

Bright Seat Springs, Elliptic, 28 inch and shorter,

1	$1\frac{1}{4}$	$1\frac{1}{2}$ in.
\$2.50	2.75	3.00 per pair.

Black Seat Springs, Elliptic, 28 inch and shorter,

1	$1\frac{1}{4}$	$1\frac{1}{2}$ in.
\$1.60	1.90	2.10 per pair.

Every description and shape of Carriage Springs made to order.

BLACKSMITH' BELLOWS, LONG PATTERN.

MONTREAL MAKE.

26 in.	28	30	32	34 in.
\$15	\$16	\$19	\$22	\$25 each.
36 in.	38	40		42 in.
\$30	\$35	\$45		\$50

N.B.—These Bellows are extra long and much improved in quality.

PORTABLE FORGES.

18 in.	20	22	24	26 inch.
\$28	\$30	\$34	\$38	\$44 each.

CANADIAN RUBBER CO'S VULCANIZED RUBBER MACHINE BELTING.

3-PLY.

2 in.	3	4	5	6	7	8	9	10 in.
13c.	19	26	33	40	48	56	64	72c. per foot.
11 in.	12	13	14	16	18	20	22	24 in.
80c.	88	98	108	128	144	160	180	200c. per foot.

4-PLY.

2 in.	3	4	5	6	7	8	9	10 in.
16c.	23	30	38	47	56	65	75	85c. per foot.
11 in.	12	13	14	16	18	20	22	24 in.
95c.	105	117	128	148	168	190	212	234c. per foot.

Intermediate widths at proportionate prices.

Heavy 5 and 6-ply Belts made to order, for purposes where strength is required (as a substitute for double leather) at an advance of twenty-five and fifty per cent on 4-ply prices.

2-PLY MACHINE BELTING.

FOR AGRICULTURAL MACHINES AND OTHER LIGHT WORK.

1 in.	1½	1½	2	2½	3	3½	4	5 in.
6c.	7	8	10	13	15	18	21	25 c. per foot.

VULCANIZED RUBBER HOSE.

CONDUCTING HOSE, 2-PLY.—Internal Diameter.

½ in.	¾	¾	1	1½	1½	2	2½	2½ in.
20c.	24	28	32	38	44	50	56	70c. per foot.
2¾ in.	3	4	5	6	7	8	9	10 in.
77c.	84	112	140	168	196	224	252	280c. per foot.

HYDRANT HOSE, 3-PLY.—Internal Diameter.

½ in.	¾	¾	1	1½	1½	2	2½	2½ in.
22c.	27	32	38	44	50	56	63	70c. per foot.
1¾ in.	2	2½	2½	2½	2½	2½	2½	3 in.
60c.	68	76	84	92	92	92	92	\$1.00. per foot.

ENGINE HOSE, 4-PLY.—Internal Diameter.

½ in.	¾	¾	1	1½	1½	2	2½	2½ in.
28c.	34	40	46	53	53	53	53	60c. per foot.
1¾ in.	2	2½	2½	2½	2½	2½	2½	3 in.
70c.	80	90	\$1.00	\$1.10	\$1.10	\$1.20	\$1.20	per foot.

5 Ply-Hose made to order at an advance of twenty-five per cent on 4-Ply prices

VULCANIZED RUBBER STEAM PACKING.

PLAIN PACKING WITH CLOTH INSERTION, in sheets of all thicknesses, from 3-32 of an inch upward..... 50 cts. p. lb.

Ditto Thinner 1-16 in. or less..... 55 " "

PURE PACKING of all thicknesses price to quality..... " "

GASKETS, *Fibrous Packing*, for Man-hole and Hand-hole Plates, Steam Chests, Cylinder Heads, &c..... 80 " "

GASKETS, WASHERS, RINGS, &c., of *Pure Vulcanized Rubber*, with or without Cloth Insertion..... \$1.00 to 1.25 "

EXTRA PURE VULCANIZED RUBBER VALVES, for Hot & Cold Water Pumps, Vacuum Pumps, Foot and Delivery Valves, &c., \$1.00 to 1.25 "

CORE PACKING, ROUND AND SQUARE, for Stuffing Boxes, Piston

Rods, &c., from 1-4 of an inch to 2 inches diameter.....

SQUARE PISTON PACKING (Rubber) all sizes, cut to exact dimensions, very convenient..... \$1.00 to 1.25 "

ROLLERS for Clothes Wringers..... 70 "

WAGON SPRINGS, Anti Rattlers, &c.....

Special orders for Gaskets, Valves, &c., of any size, that we do not keep on hand, can be executed within one week of receipt of order.

Packing about one yard wide, and in rolls as required.

* For cutting Rubber, use a sharp knife, and keep it wet.

MONTREAL PATENT STRETCHED, CEMENTED AND RIVETED OAK TANNED LEATHER BELTING.

1 in.	1½	2	2½	3	3½	4	4½	5	6 in.
\$0.07	0.12	0.16	0.20	0.24	0.29	0.34	0.40	0.45	\$0.56 p. foot.
7 in.	8	9	10	11	12	13	14	15	16 in.
\$0.65	0.75	0.85	0.95	\$1.07	1.18	1.32	1.44	1.56	1.70 p. foot.

DITTO DITTO 1 TO 4 IN. LIGHT FOR AGRICULTURAL MACHINES, &c.

Sewed Belts same as riveted, made to order. Double Belts, Double Price. Leather Fire Engine and other Hose made to order.

LACE LEATHER.

Patent Improved, No. A \$4.50, No. B \$4.00, No. 1, \$3.50, No. 2, \$3.00, No. 3, \$2.50, No. 4, \$2.00 per side.

PATENT METALLIC TIPPED BELT LACINGS.

Six sizes kept in stock, 3 feet, 4, 4½, 5, 5½, 6 feet in length.

50c. p. doz. 75 \$1.00 1.25 1.50 \$1.75 p. doz. strings.

They are put up in parcels of 1 doz. strings.

These Patent Lacings will be found very superior. They are made of the very best Lace Leather, and are prepared for use, having a *metallic tip* or *point* at each end.

BELT HOOKS.

Nos. 3	4	5	6	7	8	9
\$12.00	10.00	8.50	7.00	5.00	4.00	3.50 per m.

BELT STUDS.

Nos. 1,	2	3	4	5
\$2.00	1.50	1.00	0.90	0.75 per 100.

STEAM AND GAS FITTERS GOODS.**BEST QUALITY IRON PIPE.**

All sizes from $\frac{1}{4}$ to 3 inch. screwed and with couplings, in lengths of about 12 feet, kept in Stock. Shorter lengths imported to order.

APPROXIMATE WEIGHT OF IRON GAS TUBES.

Internal Diameter per 100 feet (Screwed and Socketed.)

$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3 inch.
45	60	85	125	180	260	320	370	430	560	650	750	850 lbs.

FITTINGS FOR THE ABOVE.

Elbows, Tees, Crosses, Bends, Return Bends, Couplings, Sockets, Plugs, &c.

GLOBE VALVE COCKS.

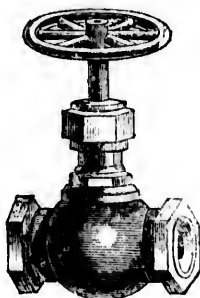
$\frac{1}{4}$ in.
90 cts.

$\frac{3}{8}$ in.
\$1.00 each.

$\frac{1}{2}$ in.
\$1.30

$\frac{3}{4}$ in.
1.70 each.

1 inch.
\$2.25 each.

**GLOBE VALVE COCKS.**

$1\frac{1}{4}$ in.
\$3.25

$1\frac{1}{2}$ in.
\$4.50 each.

2 in.
\$8.50

$2\frac{1}{2}$ in.
\$13.50 each.

3 in.
\$18.00 each.

GLOBE CHECK VALVES.

$\frac{3}{8}$ in.
\$1.00

$\frac{1}{2}$
1.30

$\frac{3}{4}$
1.60

1
2.10

$1\frac{1}{4}$ in.
\$2.80 each.

$1\frac{1}{2}$ in.
\$4.00

2
5.40

$2\frac{1}{2}$
11.25

3 in.
17.00 each.

STEAM OR WATER STOP COCKS.

Extra heavy Square Head, Round Waterway Stop Cocks, both ends Screwed for Iron Pipe.

$\frac{3}{8}$ in.
90 cts.

$\frac{1}{2}$
1.30

$\frac{3}{4}$
1.60

1 in.
2.80 each.

$1\frac{1}{4}$ in.
6.00

$1\frac{1}{2}$
10.50

2
13.00

$2\frac{1}{2}$ in.
19.50 each.

IRON MAIN COCKS.

$\frac{1}{2}$ in.
50c.

$\frac{3}{4}$
60

1
75

$1\frac{1}{4}$ in.
\$1.10 each.

$1\frac{1}{2}$ in.
\$1.50

2
2.50

$2\frac{1}{2}$
5.00

3 in.
7.50 each.

Brass Water Gauge Cocks.
Brass Hose Couplings.

Brass Try Cocks.
Brass Branch Pipes.

BEST LAP-WELDED IRON BOILER TUBES.

The following sizes kept in stock of various lengths.

2 $2\frac{1}{2}$ 3 $3\frac{1}{2}$ 4 in.

COMPRESSION WATER GAUGES.

FOR LOCOMOTIVE AND STATIONERY BOILERS.

No. 1, Square Body, 2 Rods, $\frac{5}{8}$	Scotch Glass Tubes	Price	\$7.50
" 2, Round " 2 "	" " "	"	12.00
" 3, Square, " 4 "	" " "	"	16.50
" 4, Round " 2 "	" " "	"	21.00
" 5, " " 2 "	" " "	"	25.50

SCOTCH GLASS TUBES FOR WATER GAUGES.

These Tubes are very superior and we fully recommend them to Engineers, Boiler Makers, &c.

$\frac{1}{2}$ inch tubes all lengths	12 to 18 inch.	25c.	per dozen inches.
$\frac{3}{4}$ " " "	13 to 18 "	27 $\frac{1}{2}$ c.	" "
$\frac{1}{4}$ " " "	14 to 20 "	30c.	" "

ASHCROFTS STEAM AND VACUUM GAUGES.

Steam Gauges, Iron Case,	\$3.00, \$3.00, \$10.00, \$12.00 each.
" " Brass Case,	15.00, 20.00, 25.00 each.
Vacuum Gauges, Iron Case	7.00, 12.00 each.
" " Brass Case,	20.00, 25.00 each.

CLOTHES WRINGERS.

THE NOVELTY, with Cog Wheels, No. 2, 10 inch rolls	\$7.50 each
" " " " No. 3, 11 " "	8.50 "
THE CHAMPION, " " No. 2, 10 " "	7.50 "
" " " " No. 3, 11 " "	9.00 "

The above are American make and will be found very superior.

THE ROYAL CANADIAN CLOTHES WRINGERS with Cog Wheels.....\$6.00 each.

DANVILLE SCHOOL SLATES BEST HARWOOD FRAMES.

6 x 9	6 $\frac{1}{2}$ x 10	7 x 11	8 x 12
80 cts.	90 cts.	1.00	\$1.20 p. doz.
20 doz. in a Case.	20 doz.	15 doz.	12 doz.

MIRRORS.—Hanging Glasses.

6 x 4	7 x 5	8 x 6	9 x 7	10 x 8	12 x 9	14 x 16
80 cts.	\$1.00	1.20	1.60	2.00	3.50	\$4.50 p. doz.

MAHOGANY FANCY.

10 x 8	12 x 9	14 x 10	16 x 12
\$3.50	4.75	6.00	\$7.00 p. doz.

THE COMPLETE FAMILY GLUE POT.

Filled with Glue and furnished with Brush.....Price \$1.25 per doz.

LONDON PLAYING CARDS.

Common Highlander	\$1.25 p. doz. packs.
Gold " "	2.50 " "
Best, Fancy Backs in Rich Colors and Gold, Enamelled	4.50 " "

T. STRAP. AND CHEST HINGES.**LIGHT T. HINGES.**

3	4	5	6	8	10	12	14 inch.
\$0.75	0.80	0.85	0.90	1.20	2.10	3.00	3.60 p. doz. pairs.

LIGHT STRAP HINGES.

3	4	5	6	8	10	12	14 inch.
\$0.88	1.06	1.12	1.20	1.90	3.00	4.50	5.75 p. doz. pairs.

LONG CHEST HINGES.

6	8	10	12	14 inch.
\$1.20	1.50	2.00	2.75	\$3.50 p. doz. pairs.

HEAVY T. HINGES from 4 to 18 inches.....cts. per lb.

" STRAP " 6 to 14 " " " "

HOOKS & HINGES ass'd. 12 to 30 " " " "

ditto ditto with Bolts, Nuts and Rest assorted

18 to 30 inches..... " " "

JOINTED HASPS AND STAPLES. ON PLATES.

4 6 8 inches.

WROUGHT HASPS AND STAPLES WITH HOOKS.

6 7 8 inches.

IRON RIVETS, BLACK AND TINNED.**IRON-BLACK.**

8 oz.	10	12	14	1 lb.	1½	1¾	2	2½ lb.
16 cts.	18	20	21	22	25	28	31	34 40cts per M.
3 lb.	4	5	6	7	8	10	12	14 16 lb.
46 cts.	56	70	88	\$1.00	1.13	1.38	1.64	1.88 2.25 per M.

IRON TINNED.

8 oz.	10	12	14	1 lb.	1½	1¾	2	2½ lb.
20 cts.	22	25	27	29	31	35	38	cts. per M.
2 lb.	2½	3	4	5	6	7	8	lb.
40 cts.	46	56	75	94	\$1.15	1.37	1.57	per M.

These rivets are made of *best* Iron and are warranted a good article.

The **AMERICAN SCREW COMPANY'S** Rivets, which are made of *Charcoal Iron*, we also supply, but at higher prices than the above.

N. B.—We are Agents for this Company and import to order all the Goods manufactured by them, viz: Rivets, Bolts, Machine Screws, Wood Screws, &c.



JOHN OAKEY & SON'S
WELLINGTON EMERY & BLACK LEAD MILLS.
LONDON, ENGLAND.

We have on hand a Stock of the following Goods of their manufacture, viz :
 Wellington Mills Emery, Corn, all numbers
 " " " Flour.....

OAKEY'S SILVERSMITHS' SOAP

Oakey's Silversmiths' Soap \$1.50 per doz.
 " Pencil Black Lead in silver foll..... 17½ cts. per lb.
 " Servant's Friend Black Lead..... 8 & 10 " "
 " Tablet Black Lead..in 1 and 2 oz. Tablets..... \$2.00 per Box.
 Victoria " " " " " " 15 cts. per lb.

OAKEY'S INDIA RUBBER KNIFE BOARDS

Oakey's Patent India Rubber Knife Boards,
 18 in. 21 24 30 36 inches.
 \$2.00 3.50 4.25 5.00 6.50 p. doz.

OAKEY'S WELLINGTON KNIFE POLISH

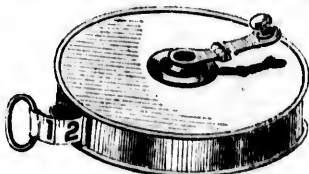
Oakey's Wellington Knife Polish, in Canisters \$1.50 p. doz.
 Carpenters Lead Pencils, Oval and Round \$3.00, \$3.50 & \$4.50 p. gro.
 Fabers Carpenters Pencils, White Wood, Flat, \$3.00, \$4.00 " "
 Drawing and Office Pencils \$2.00, \$3.00 & \$5.00 " "
 Wellington Emery Cloth all numbers \$11.00 per Ream.
 Chamols Skins, No. 0, 1, 2, 3,
 \$2.50 3.00 4.50 \$6.50 per doz. Skins.
 Carpenters Tool Baskets, Bound, Medium, \$6.00, Large size, \$6.50 p. doz.

Orders for importation direct solicited.

JAMES' DOME BLACK LEAD STOVE POLISH.

In Boxes of 144 Domes price per Gross Domes.....\$—

We are Agents for Messrs. JAMES PARKES & SONS of England, MATHEMATICAL, PHILOSOPHICAL and OPTICAL Instrument makers, and keep in stock an assortment of their Goods.



Ass Skin Case, No. 500.



Solid Leather Case.

MEASURING TAPES.—Warranted correct.

No. 500—ASS SKIN BRASS BOUND CASE, Cotton Tape Waterproofed.

20	30	66	90 feet.
\$4.00	4.50	5.00	\$7.00 per dozen.

No. 206—STRONG JAPANNED LEATHER CASE, folding handles, best Cotton Tape Waterproofed.

30	66	90 feet.
\$7.00	10.00	\$14.00 per dozen.

No. 208—SOLID LEATHER CASE, folding handles, best ribbed Linen Tape, Waterproofed.

30	66	90 feet.
\$11.00	15.00	\$20.00 per dozen.

No. 209—IMPROVED SOLID LEATHER CASE, best strong corded Linen Tape, Waterproofed, extra wide.

66	90 feet.
\$18.00	\$22.50 per dozen.

No. 210—SUPERIOR SOLID LEATHER CASE, patent inflexible Tape, Waterproofed, extra strong, and wide—for RAILWAY and SURVEYING purposes—this Tape is a very superior article and will be found *correct, rigid and durable*.

66	90 feet.
\$21.00	\$30.00 per dozen.

No. 560—PATENT METALLIC OR WIRE WARP TAPE, in solid Leather Case, folding handle. This Tape has BRASS WIRES running through its entire length, which prevent *contraction or expansion*, and make it more *durable and correct* than any other.

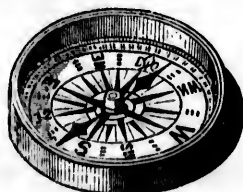
66	90 feet.
\$27.00	\$36.00 per dozen.

SMALL WIND UP TAPES FOR THE POCKET.

No. 215,	3	\$2.00	6	\$3.00	12 feet.	\$3.50 per dozen.
No. 219—Spring Tapes, with Stop, Plated Case,	3	feet.	6.00	per dozen.		
"	"	"	"	"	5 feet.	7.00 " "

ALSO.—TAILORS' AND OTHER TAPES.

POCKET COMPASSES.

SUPERIOR
QUALITY.WARRANTED
CORRECT,

POCKET COMPASS in Neat Brass Case, with Cover.

No. 366, (1½ in.)	367, (1½ in.)	368, (1½ in.)
\$2.25	2.75	\$3.50 per dozen.

Ditto ditto Superior finish.

No. 370, (1½ in.)	371, (1½ in.)	372, (1½ in.)
\$1.00	4.50	\$5.50 per dozen.

POCKET COMPASS, in best Brass Case, Extra finish with Cover, *Agate Cap*, Bar Needle and Stop—A Superior article very reliable.

No. 374, (1½ in.)	375, (1½ in.)	376, (1½ in.)
\$9.00	11.00	\$12.50 per doz.

POCKET COMPASS, in round Morocco Case, with Cover, *Agate Cap*, Bar Needle and Stop—This is also a superior article and very reliable.

No. 396, (1½ in.)	397, (1½ in.)	398, (1½ in.)
\$10.00	12.00	\$15.00 per dozen.

POCKET COMPASS, in round Walnut Wood Case and Stop—A good article.

No. 401, \$9.00 per dozen.

POCKET COMPASS, in Brass Case with pendant.

No. 300, \$2.50	361, 3.00	362, \$4.50 per dozen.
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Ditto ditto with Stop Superior finish.

No. 64, \$5.50 65, \$6.50 per dozen.

Small Gilt Trinket Pendant Compasses, No. 59, \$1.50 per dozen.

BOAT COMPASSES.

BEST BRASS CASE COMPASS with Cover and Floating Dial.

No. 381—2,	2½,	3,	3½,	4 in.
\$8.00	10.00	13.50	15.00	20.00 per doz.

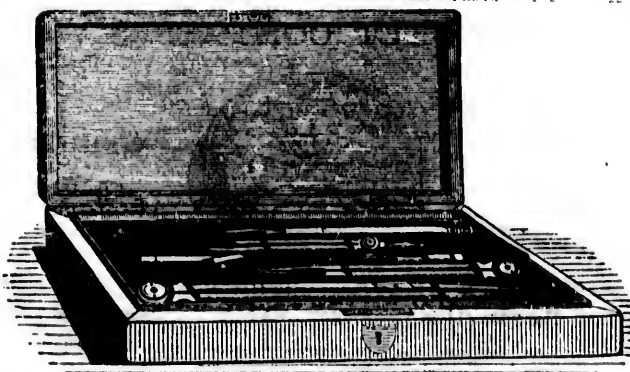
Ditto ditto with *Agate Cap*, Needle and Stop.

No. 388—2,	2½,	3,	3½,	4 in.
\$14.00	16.00	18.00	21.00	\$24.00 per doz.

These Boat Compasses will be found very useful and convenient for small vessels, Pilot Boats, &c., on our large Lakes and in the Gulf of St. Lawrence.

SHIP STEERING COMPASSES in Oak Case,

No. 480, Wood Bowl,—6, in.	\$2.00	7 in.	\$2.50 each.
No. 481, Brass Bowl,—7, in.	\$4.00	8 in.	\$5.00 each.



MATHEMATICAL DRAWING INSTRUMENTS.

No. 2, Set Brass Instruments in fancy Cloth Case, 5 instruments.	\$0.50 each.
" 3, " " " " " " 6 " "	0.80 "
" 4, " " " " " " 7 " "	1.20 "
" 5, " " " in Stained Wood Case, 8 " "	1.50 "
No. 597, Set Brass Instruments in Mahogany Case.....	1.80 "
" 598, " " " " " " " " " " " "	2.30 "
" 600, " " " Mahogany Snap Case.....	2.80 "
" 602, " " " " " " " " " " " "	3.50 "
" 603, " Electrum Instruments in Mahogany Lock up Case	5.00 "
" 605, " " " " in Walnut Lock up Case..	6.00 "
" 608, " " " " " " " " " " " "	9.00 "
" 610, " " " " " " " " " " " "	12.00 "
" 702, " best finished Electrum Instruments in Rosewood Case Silk Velvet Lined, &c.....	16.00 "
" 703, ditto ditto better finished ditto ditto	20.00 "
" 705, ditto ditto very complete in best Rosewood Case.	27.50 "
" 706, ditto ditto ditto ditto ditto	35.00 "
" 707, ditto ditto Superior finish, most complete, in very best 12 in Rosewood Case	50.00 "

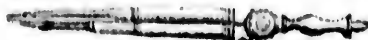
•• The last four cases are very complete, and the instruments of the best quality and finish.

Also:

Ivory and Box Wood Rules, Ivory and Box Wood, Protractors, Sectors, Architects, Gunters, Universal, Marquois, Plotting and Chain Scales.

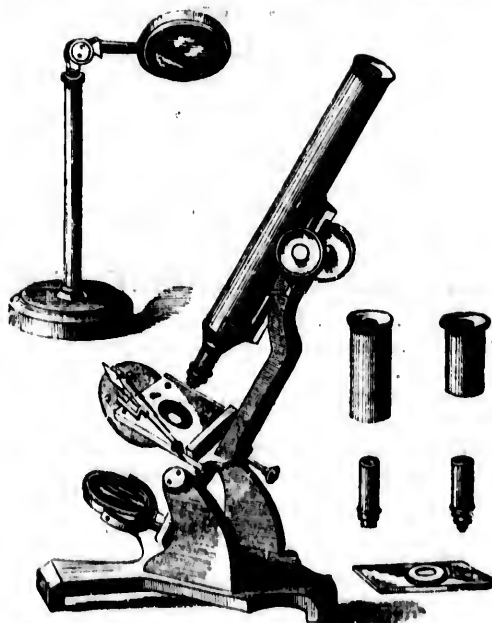


DRAWING PENS.



BOW PENS.

Compasses, Dividers, &c.



ACHROMATIC MICROSCOPES.

SCHOOL MICROSCOPES, with Achromatic Object Glasses, in Mahogany Cabinet complete,..... \$6.00 & 10.00 each.

STUDENTS MODEL MICROSCOPES, with Achromatic Object Glasses, in Mahogany Lock-up Cabinet complete,... \$15.00 & 20.00 "

(See Cut above.)

MEDICAL & EDUCATIONAL MICROSCOPES, with superior English Achromatic Object Glasses, in Mahogany Lock-up Cabinet complete,..... \$30, \$40 & \$50 "

DISSECTING MICROSCOPES, \$10.00 & 20.00 "

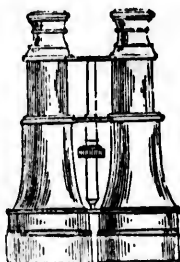
ELEGANT DRAWING ROOM MICROSCOPES, with superior English Achromatic Object Glasses, in Mahogany Cabinet complete,..... \$50.00 & 80.00 "

LARGEST SIZE MICROSCOPES for Scientific and Medical purposes, with first class English Achromatic Object Glasses, with or without Binocular Bodies, (to order)... \$100, \$150 & \$200 "

These Microscopes are highly recommended. The Object Glasses, for defining and penetrating power, cannot be excelled.

MICROSCOPIC PREPARATIONS,—Insect Dissections, Wood Sections, Fossil, Infusoria, &c., &c. (Mount'd on Slides).. \$2.50 per doz.
Ditto ditto ditto Superior (Norman's) 3.50 "

ANATOMICAL PREPARATIONS, Transparent & Opaque,—finely Tinted and Injected,..... \$5.00 to \$9.00 "



OPERA, TOURIST & MARINE GLASSES.

OPERA GLASSES.....	\$3.00	\$4.00	\$5.00	\$7.50 each.
TOURIST AND MARINE....	10.00	12.00	16.00	20.00 "
LAND CHAINS		2.50	3.00	4.00 "
ANEROID BAROMETERS			12.00	15.00 "

WATCH POCKET, ditto—*very portable*—Hygrometers, &c., &c.

THERMOMETERS, Brewers, Dairy, Garden, Registering, Standard, Day and Night, Maximum and Minimum, in various Mountings, &c., &c.

LEVELS, Surveyors, Gavatt or Dumphy, Building, Draining, Mining, &c., &c.

Theodolites, Transit Instruments, Circumferenters, &c.

Quadrants, Sextants, Artificial Horizons, Ship Binnacles and other Nautical Instruments.

SPECIFIC GRAVITY INSTRUMENTS, viz: Hydrometers, Oleometers, Salinometers, Urinometers, &c., &c.

Electrical and Galvanic apparatus.

Telescopes, Opera, Field and Marine Glasses.

Magic Lanterns and other Optical Instruments.

NOTE.—All goods manufactured by J. Parkes & Sons are warranted of superior quality and finish and guaranteed to be as represented. Every article bearing their Trade Mark as below may be relied on as genuine.



Samples and Drawings of the above may be seen at our Warehouse, prices and other information supplied on application.

•• Orders for importation direct solicited.

NOTE.—The attention of School Commissioners, Heads of Colleges, Academies, &c., is called to the foregoing lists of Instruments.

SPECTACLES.

STEEL BLUED FRAME, assorted ages.

No. 1	2	3	4	5
\$1.60	2.20	3.00	4.00	\$5.00 per doz.
Plated Frame Spectacles, at \$2.50 3.00 4.50 per doz.				

PATENT ELECTRO PLATED SPOONS, FORKS, BUTTER KNIVES, &c., &c.



(Warranted Superior Quality and finish.)

Quality Marks and Price.

FIDDLE PATTERN.						A1	B	D
						\$ cts	\$ cts	\$ cts.
Table Spoons	-	-	-	-	per dozen.	7 50	5 00	3 00
Dessert "	-	-	-	-	do	5 00	3 50	2 50
Table Forks	-	-	-	-	do	7 50	5 00	3 00
Dessert "	-	-	-	-	do	5 00	3 50	2 50
Tea Spoons No. 1	-	-	-	-	do	3 00	2 00	1 50
" " No. 2	-	-	-	-	do	.....	.....	1 20
Salt "	-	-	-	-	do	3 00	2 00	1 20
Mustard Spoons	-	-	-	-	do	3 00	2 00	1 20
Egg "	-	-	-	-	do	3 00	2 00	1 20
Salt Spoons Gilt Bowls	-	-	-	-	do	4 00	3 00	2 50
Mustard " " "	-	-	-	-	do	4 00	3 00	2 50
Egg " " "	-	-	-	-	do	4 00	3 00	2 50
Toddy Ladles	-	-	-	-	each	80	60	45
Sauce "	-	-	-	-	do	1 00	75	50
Soup "	-	-	-	-	do	3 00	2 00	1 60
Gravy Spoons	-	-	-	-	do	2 00	1 40	1 00
Coffee Spoons	-	-	-	-	per dozen			\$2 50
Sugar "	-	-	-	-	do			2 50
" " Sifters	-	-	-	-	do			7 50
Butter Knives, pearl Handles	-	-	-	-	No.	704		9 50
" " " " "	-	-	-	-	"	319		13 50
" " Ivory " "	-	-	-	-	"	545		5 00
" " Fine white Bone Handles	-	-	-	-	"	543		4 50
Pickle Forks, Long Ivory Handles Trident Prongs	-	-	-	-	-	-		7 00
" " Plated " " Barbed Points	-	-	-	-	-	-		6 00
ELECTRO PLATED Cruet Frames, Cut Glass Bottles.								
Nos.	3	5	7	9	11	13	15	17
	\$5.50	5.50	7.50	8.25	10.00	11.00	13.00	14.00
ELECTRO PLATED Toast Racks, at								
	\$2.00		2 50		3.00		\$4.00	each

ALSO,—An assortment of ELECTRO PLATED Sugar Baskets, Butter Coolers, Mugs, Fish Carvers, Childrens Sets, &c., &c.

N. B.—The A 1 & B qualities, in patent Electro plate, are warranted plated upon the New Argentine Silver, which is almost equal to sterling Silver in hardness, color, &c.

The D. quality is plated upon pure Nickel Silver, a really good article.

The quality is indicated by a letter at the head of each Column, and every article is warranted of its professed quality.

PURE ARGENTINE
AND
NICKEL SILVER SPOONS, FORKS, &c., &c.



(Warranted Superior Quality and finish.)

Quality Marks and Price

FIDDLE PATTERN.							A I	B	D
							\$cts	\$cts	\$cts
Table Spoons	-	-	-	-	-	per dozen	2.50	2.00	1.50
Dessert "	-	-	-	-	-	"	2.00	1.60	1.30
T a	"	No 2	-	-	-	per gross	12.00	9.00	7.00
"	"	No. 1	-	-	-	"	.....	8.00	6.00
"	"	01	-	-	-	"	.....	.....	5.00
Table Forks	-	-	-	-	-	per dozen	2.50	2.00	1.60
Dessert "	-	-	-	-	-	"	2.00	1.60	1.30

Salt Spoons, Egg and Mustard Spoons, 60 cts. per dozen.

Butter Knives, Nickel Silver, with good Bone Handles No. 547, \$3.00 doz

" " " " " 549, 3.50 "

N. B.—The Argentine Silver A I is free from Acid and cannot be excelled for hardness, whiteness and durability.—The Nickel Silver (B & D) is warranted same Color all through and improves by using.

HALIFAX SKATES.

Forbes Patent Acme Club Skates, assort'd sizes 8 to 11½ in. \$4.00 per pair.

Forbes' Patent Acme, 67 Skates, " " 8½ to 12½ " 3.00 " "

Forbes' Patent Acme V. C. Skates " " 9 to 12 " 3.00 " "

Starr Skeleton Skates " " 9½ to 12 " 2.00 " "

Also a large assortment of English and German Skates.

FISHING TACKLE, &c.

Fishing Rods - - - - - No. 152 \$4.00 each.

" " Superior, with extra Top - - - " 159 6.00 "

" Reels - - - - - \$1.50 & 2.00 "

Fish Hooks, Fishing Spoons, Lines, &c., &c., &c.



CANADIAN DEPOT
FOR
BALLARDS PATENT BREECH-LOADING RIFLES,
THE STANDARD REVOLVERS,
X. L. REVOLVERS,
SMITH & WESSONS REVOLVERS & BREECH-LOADING SINGLE SHOT PISTOLS,

AND FOR

Patent Waterproof Metallic Cartridges.

BALLARD'S PATENT BREECH-LOADING SPORTING RIFLES.

Calibre 44-100 inches; other Gauges to order.

26. 28 inch Barrels.

Price.....

BALLARD'S PATENT BREECH-LOADING KENTUCKY RIFLES.

Length of Barrel 30 inches, Calibre 46-100 inch.

POCKET RIFLES.



BREECH LOADING POCKET RIFLE, 10 in. Barrel, No. 22 Calibre, Plated Rest. This is a most convenient weapon, combining the accuracy of the Rifle with the portability of a Pistol, the "Rest" unfixes, and may be detached, for carrying in the pocket. Price \$12.00 each.



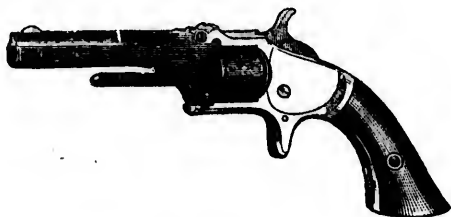
NEW MODEL POCKET RIFLES.

Heavy Barrel, Large Calibre, Extra Strong Plated Rest.

10.	12,	15,	18 inch Barrel.
\$16.00	18.00	20.00	22.00 each.

STANDARD REVOLVERS.

POCKET SIZE.



This Revolver is made on SMITH & WESSONS pattern, has *plated* Frame and is neatly mounted. It is a very superior 7 shot Pistol, the Cylinder is longer than that of any other 22-Calibre Revolver, permitting the use, if desired, of the 22 long Cartridge, which renders it the *most effective* 22 Calibre Revolver made.

The Stop and the Stop Spring are under the Cylinder, and are not likely to get out of order.

The Centre-Pin extends through the Cylinder, so that the Cylinder revolves with ease and steadiness.

If desired, the *stop* holds the Cylinder *firmly*, with the hammer resting between the cartridges, rendering it safe for the pocket.

The weight is as light as is consistent with perfect safety, durability and steadiness of aim. Price \$10.00.

X. L. REVOLVERS.

(SMITH & WESSONS MODEL.)

\$7.50 \$9.00 \$10.50 \$12.00 each.

SMITH & WESSONS NEW MODEL REVOLVERS.

No. 1 1½ 2

SINGLE SHOT BREECH-LOADING CARTRIDGE PISTOLS.



STEVENS No. 1—3 inch Barrel, 22-100 Calibre.....Price \$4.00 each.
ALLEN'S No. 40—2 inch Barrel. \$3.25, 3 in. \$3.50, 4 in. \$4.00 each.

PATENT WATERPROOF METALLIC CARTRIDGES.

Of Superior Quality.



DESCRIPTIVE PRICE LIST.

- No. 22, (or 1,) \$5.87 per M.—adapted to Smith & Wesson's No. 1, Sharp's No. 1, and other Pistols.
- No. 22, (long) \$7.50 per M.—adapted to the Standard Revolvers.
- No. 30, \$10.50 per M,—adapted to Sharp's No. 2, Single Shot and other Pistols.
- No. 32, (short) \$11.00 per M,—adapted to Smith and Wesson's No. 1½ Sharp's No. 3, Elliot's, and other Pistols.
- No. 32, (or 2) \$12.00 per M,—adapted to Smith & Wesson's No. 1½ and 2, and other Pistols, also to Ballard's, Wesson's and other Rifles.
- No. 38, (long) \$17.50 per M,—adapted to Ballard's Wesson's, Allen's and other Rifles.
- No. 38, (extra long) \$20.50 per M,—adapted to
- No. 44, (long) \$21.00 per M,—adapted to Ballard's Wesson's Allen's and other Rifles.
- No. 44, (extra long) \$22.50 per M,—adapted to the Howard Rifle.
- No. 44, H \$25.00 per M,—adapted to the Henry or Winchester Carbine and Rifle.
- No. 46, \$26.50 per M,—adapted to Ballard's, Remington's Joslyn's and other Rifles, of this Calibre.
- No. 46, \$32.00 per M,—adapted to Spencer's Sporting Rifle.
- No. 56, \$32.00 per M.—adapted to Spencer's Rifles and Carbines.
- No. 64, Cal. 42—\$21.00 per M,—for Ethan Allen & Co's Rifles.

AMMUNITION FOR EAGLE REVOLVERS.



- No. 30, \$17.50 per M,—adapted to "Eagle Arms Co's Revolver No. 1
- No. 42, \$25.00 per M,—adapted to "Eagle Arms Co's Revolver No. 2

Aliberal discount allowed to dealers.

AMMUNITION FOR SNIDER ENFIELD RIFLE.

- BOXER CARTRIDGES 577-1000, per 100 \$.....
- Ditto Cartridge Cases, Empty per 100 \$.....
- Ditto Lead Bullets for ditto, per 100 \$.....

MUZZLE LOADING GUNS.
SINGLE AND DOUBLE BARRELS,
BEST ENGLISH MAKE.
ALL WARRANTED DOUBLE TOWER PROOF.

SINGLE BARRELS.

Number.	Price each.
100 Single Gun, Imitation twist	\$3.50
101 Single Gun, Spanish barrel, Imitation twist steel Mounted fall ribbed	4.00
103, ditto. ditto. better finished	4.50
105, ditto. ditto. Imitation patent breech, long strap breakoff..	5.00
107, ditto. ditto. Twist barrel and patent breech, varnished Walnut Stock	6.50
108, ditto. ditto. A sound gun throughout	7.50
109, ditto. ditto. London fine twist well finished	8.50
111, ditto. ditto. Walnut Stock Oiled, better finished	9.50
113, ditto. ditto. Extra finish, a superior Gun	10.50
115, ditto. ditto. Damascus Twist, best heart Walnut Stock, extra finished and engraved	12.00

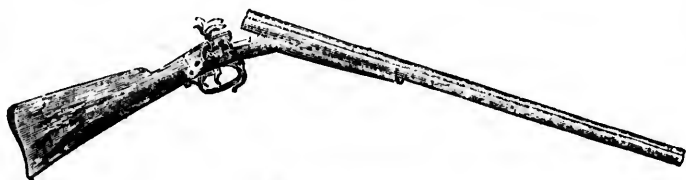
DOUBLE BARRELS.

121, Double Gun, Imitation twist, steel mounted, short strap breakoff	8.00
123, ditto. ditto. Patent breech, better finished	9.00
125, ditto. ditto. Twist barrel and patent breech varnished Wal- nut Stock	10.50
127, ditto. ditto. London Twist, better finished and engraved	12.50
129, ditto. ditto. London fine twist, a good sound Gun	15.00
131, ditto. ditto. Heart walnut stock oiled, best finish	18.00
133, ditto. ditto. ditto. a very superior Gun, well finished.	22.50
135, ditto. ditto. Laminated Steel Barrels, indestructible by Gun- powder, extra finish	27.50
137, ditto. ditto. Damascus Twist ditto. ditto	30.00

BOYS GUNS.—SINGLE BARRELS.

91, Boys Guns, (with short stocks,) Spanish barrels about 24 inch long, imitation twist, steel mounted	5.00
93, ditto. ditto. Twist barrels and Patent Breech, walnut stocks, steel mounted, well finished	6.50
95, ditto. ditto. London Fine Twist, ditto	8.00
97, ditto. ditto. Damascus Twist, ditto	10.00

BREECH LOADING GUNS.



SINGLE BARRELS.

Number.	Price each
141. Single Breech Loading Gun, Twist barrel good walnut stock oiled.....	\$20.00
143, ditto. ditto. <i>London Fine Twist</i> superior finish...	25.00

DOUBLE BARRELS.—PIN FIRE

151, Double Breech Loading Gun, <i>Twist barrels</i> , good walnut stock, well finished (pin-fire).....	25.00
153, ditto. ditto. better finished, &c. (pin-fire).....	30.00

CENTRAL FIRE.

161, ditto. ditto. <i>Twist barrels</i> , walnut stock (central fire)	30.00
163, ditto. ditto. <i>London Fine Twist</i> , well finished and engraved (central fire)	32.50
165 ditto. ditto. <i>Laminated Steel Barrels</i> , superior finish (central fire).....	37.50
167, ditto. ditto. <i>Fine Laminated Steel Barrels</i> , extra finish (central fire).....	45.00
169, ditto. ditto. <i>Damascus Twist</i> , extra finished and engraved (central fire).....	50.00
171, ditto. ditto. <i>Stub Damascus</i> well finished and engraved (central fire).....	60.00
173, ditto. ditto. <i>Fine Steel Damascus Barrels</i> , extra engraved and finished (central fire)	75.00

Our Breech Loaders are No. 12 Bore, by 30 in. Barrels and No. 10 Bore by 23 in Barrel—other gauges & lengths imported to order.

When ordering please give the price and number of the gun required.

N. B.—All our Guns are ENGLISH MAKE AND WARRANTED DOUBLE TOWER PROOF, that is: *proved first in the rough, and again when the Barrels are finished*, thus ensuring safety from bursting. The finish, of even our lowest price twist barrel guns, will recommend them to purchasers as the cheapest and best goods in the market, and their safety under *double proof*, as above may be fully relied upon.

BREECH LOADING GUN IMPLEMENTS.

Best quality and finish.

Cartridge Recappers, Pin fire	\$1.50 each
“ “ Central fire	1.00 “
“ “ “ “ in sets.	2.00 “
“ Closers, Pin fire.....	2.50 “
“ “ Central fire.....	3.00 “
Horizontal Closing Machine, Pin fire.....	3.00 “
“ “ “ Central fire	3.50 “
Cartridge Extractors.....	0.50 “
“ “ Eccentric... ..	1.50 “
Cap Ejector and Block	1.50 “
Cutting and Loading Rod	1.25 “
Powder Measure	0.50 “
Shot ditto	0.50 “
Powder and Shot Measure combined.....	0.80 “
Breech Cleaners	0.60 “
Barrel ditto.....	1.50 “
Elys Caps for Breech Loading Cartridge Cases Pin fire...	
Ditto. ditto. Central fire.....	
Boxer Cartridge Creasers for Rifle Cartridges.....	2.50 “
Cartridge Carriers, for 20 Rounds, with Shoulder Strap..	3.00 “

*• The above Breech Loading Implements are for No. 10, 12, 14 Gauge Guns.

PATENT DISTANCE RIFLE GAUGES, for obtaining correct

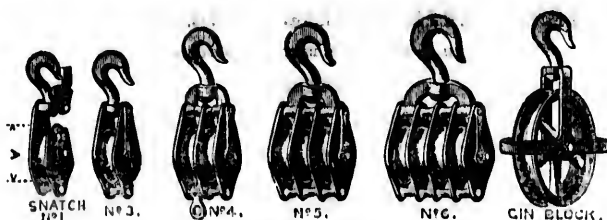
Range with directions for use \$1.00 each

 By the use of this simple instrument a Rifleman can estimate with accuracy any distances from 50 to 900 Yards.

PATENT GAS TIGHT CARTRIDGE CASES,

Pin or Central fire..... 1.50 & 1.75 per 100

Also,—A full assortment of the following kept in stock.—Powder Flasks, Shot Pouches and Belts, Gun Wadding, Gun Locks, Nipples, Plugs and Nipples, Nipple Wrenches, Gun Turn-screws, Cleaning Rods, Wood Cutters, Bullet Moulds, Gun Worms Ram Rod Tips, Shot Chargers, Wire Shot Cartridges, Percussion Caps, English and German, Powder, Shot, &c., &c.

**IMPROVED****WROUGHT IRON LONDON PATTERN PULLEY BLOCKS.**

Special attention is called to the improvement in these Blocks, each plate forms a support for the centre shaft to the flanges protecting the pulley from damage, and thus combining strength with durability; they are made of best refined iron; we can therefore with confidence recommend them.

WROUGHT IRON PULLEY BLOCKS.

For Rops of Sizes given.

Single or 1 Sheave Blocks.

$\frac{1}{2}$ in.	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{2}$ inch.
\$1.70	2.00	2.40	3.00	4.00	5.50	7.00	9.00	13.00	21.00 each.

Double or 2 Sheave Blocks.

$\frac{1}{2}$ in.	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{2}$ inch.
\$2.50	2.80	3.50	4.50	6.00	8.00	11.00	15.00	21.00	30.00 each

3 Sheave Pulley Blocks.

$\frac{5}{8}$ in.	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{2}$ inch.
\$3.25	4.50	6.00	7.50	10.00	13.50	21.00	30.00	50.00 each.

4 Sheave Pulley Blocks.

$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 inch.
\$4.50	5.50	7.00	9.50	13.50	20.00	30.00	50.00 each.

SNATCH BLOCKS

$\frac{3}{4}$ in.	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 inch.
\$3.00	4.00	5.00	6.50	8.50	12.50	22.50 each

N.B.—The 1 $1\frac{1}{4}$ $1\frac{1}{2}$ $1\frac{3}{4}$ 2 $2\frac{1}{2}$ inch. Pulley Blocks, will take Coil Chain of $\frac{1}{4}$, 5-16, $\frac{3}{8}$, 7-16, $\frac{1}{2}$, 9-16, inch.

GIN BLOCKS OR RUBBISH PULLEYS.

6 in.	7	8	10	12	14	16	18 in diameter of wheel.
\$3.00	3.30	3.75	4.50	5.00	6.00	7.50	9.00 each.

PATENT DIFFERENTIAL PULLEY BLOCKS.

WITH 40 FEET BEST BEST CHAIN TO EACH.



These are worked by pulling at the Chain.

Prices, tested to 5 cwt.	10	20	30	40 cwt.
	\$11.00	15.00	20.00	24.00 27.50 each.
Extra Chain	12½c	13½c	20c	25c 27½c per foot.

The peculiar merit attached to these Pulleys is, that while they are more powerful than the ordinary pulley Blocks, they also possess the novel and invaluable quality of not "running down," under any circumstances, whilst the load is suspended to them. Wherever weights have to be lifted, this hoisting tackle WILL BE FOUND INVALUABLE.

HARCASTLES PATENT, DIFFERENTIAL PULLEY BLOCKS.

AND

EADES PATENT EPICYCLOIDAL PULLEY BLOCKS.

Imported to order.

HOISTS.

PATENT "DESPATCH" HOIST, price \$30.00, Chain Extra.

PATENT "SAFETY" HOIST, price \$30.00, Chain Extra.

PATENT "SAFETY" BRACKET CRAB, price \$20.00, Chain Extra.

PATENT "DESPATCH" BRACKET CRAB, price \$20.00, Chain Extra.

Imported to order.

SCREW JACKS.



BOTTLE JACKS.



RATCHET SCREW JACKS.

BOTTLE SCREW JACKS.

With Wrought Iron Screws and Cast Iron Frame.

Number.	Height when down.	Will lift.	Price.
2	15 in. hts.	2 Tons.	\$6.50 each
3	18 "	4 "	7.50 "
4	21 "	6 "	9.00 "
6	24 "	8 "	12.00 "
7	24 "	10 "	16.00 "

BOTTLE SCREW JACKS, ALL WROUGHT IRON.

Number.	Height when down.	Will lift.	Price.
1	21 inches.	6 Tons.	\$27.50 each
2	24 "	8 "	32.50 "
3	27 "	10 "	37.50 "

AND IMPORTED TO ORDER.

HALEY'S PATENT SCREW JACKS.

Wood Case to lift 2 Tons	4	8	12 Tons.
\$28.00	35.00	45.00	60.00 each.

(In Iron Case about 5 per cent higher.)

TRAVERSING JACKS.

With double Ratchet Lever to Main Screw, 4 sizes to lift from 6 to 20 Tons each.

WYOLASS SCREW JACKS.

Single or double purchase.

TRIPOD WYOLASS SCREW JACKS.

Double purchase.

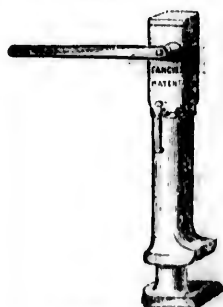
RACK AND PINION JACKS.

Double purchase.

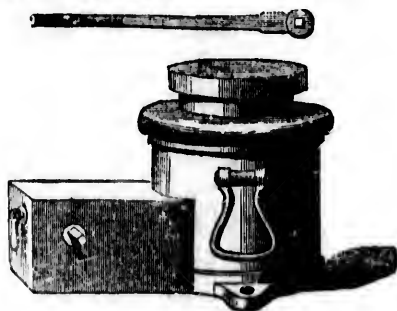
IMPROVED HOISTING CRABS.

Furnished with patent breaks give absolute security against accident, they are also much more reliable than the ordinary crab, being under perfect control, 10 sizes made to lift from 1 to 15 Tons.

PATENT HYDRAULIC LIFTING AND SHIP JACKS.



LIFTING JACK.



SHIP JACK.

LIFTING JACKS, WITH FAST CLAWS.

Capacity 6 Tons.	Height 24 in.	Weight 68 lbs.	Price \$60
" 10 "	" 26 "	" 86 "	" 80

Ten sizes made will lift from 4 to 60 Tons.

NOTE.—These Jacks are offered with confidence as being the *best* ever imported. Each one has a *fast* claw, which will be found *sifer* and more convenient than a loose one. They lift either from foot or top, are simple in action and construction, very safe and portable, made of the best Scrap Iron and are so arranged that one man can lift from 4 to 60 tons.

PATENT HYDRAULIC TRAVERSING JACKS.

Similar to the foregoing, but with traversing movement.

Six sizes made, will lift from 4 to 20 tons.

SHIP JACKS.

For lifting Ships and for other Heavy purposes.

See cut above.

Seven sizes made will lift from 30 to 200 tons.

NOTE.—The Pump and Cistern can be detached from the Ram of the Ship Jack for action at any distance from the weight to be raised.

ALSO :

HOLMANS PATENT DOUBLE ACTION PUMPS.

For House, Farm and Garden purposes.

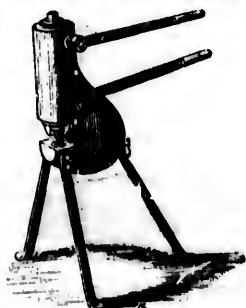
AND

THE SPECIAL STEAM PUMP.

20 sizes of these made, will pump from 300 to 20,000 gallons per hour, at prices ranging from \$80.00 to \$1000.00.

The Traversing and Ship Jacks, and the Special Steam Pumps, imported only to order.

PATENT HYDRAULIC PUNCHING & CHINES.



Open Mouth Punching Bear



Patent Hydraulic Shearing Machine.

OPEN MOUTH BEAR.

4 sizes made to punch holes $\frac{3}{4}$ to $1\frac{1}{4}$ inch, in Plates or Bars $\frac{1}{2}$ to 1 in thick.

CLOSE MOUTH BEAR, FOR PUNCHING RAILS, GIRDERS, &c.

4 sizes made. Imported to order.

PATENT HYDRAULIC SHEARING MACHINES.

Two sizes made will cut from $\frac{1}{2}$ to 2 in. square or Round Iron, and $3 \times \frac{1}{2}$ to $4 \times \frac{3}{4}$ in. flat Iron.

PATENT HYDRAULIC PRESSES.

Hydraulic Presses for Wood, Cotton, Hay, Hides, &c.

" " for Dry Goods Packing, Printers, Book Binders, &c.
20 sizes made. Capacity 15 to 150 Tons.

" " for Linseed and other Oils.

PATENT HYDRAULIC TESTERS AND PROVING PUMPS.

Hydraulic Girder Testers to test from 50 to 150 tons.

" Proving Pumps for Testing Boilers, Pipes, Tanks, &c.

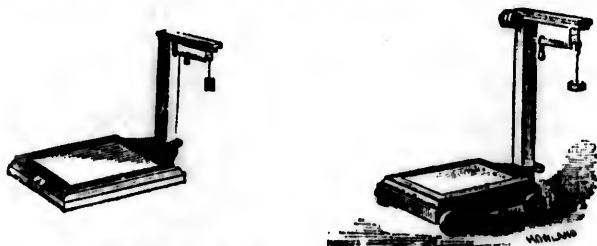
ALSO—Cotton Screw Presses, for packing Wool, Cotton, several sizes, Hay, &c., &c.

And Portable Cranes, improved make, capacity 12 cwt. to 12 tons.

Warf Cranes, " " " 1 to 10 tons, &c.

N. B.—The Machines on this page imported only to order.

FAIRBANK'S STANDARD SCALES.



PORTABLE PLATFORM SCALES.

DESCRIPTION.	CAPACITY.	SIZE OF PLATFORM.	PRICE, without wheels.	PRICE, with wheels.	PRICE, with wheels & drop lever.
No. 1.....	5000 lbs.	48 x 48 in	\$.....	\$135.00	\$.....
No. 2.....	3 00 "	39 x 30 "	.....	.....	90.00
No. 7.....	2500 "	30 x 23 "	.....	.....	70.00
No. 7.....	2 00 "	30 x 13 "	52.0.	56.00	.....
No. 8.....	2 00 "	30 x 2. "	.....	.....	60.00
No. 8.....	1600 "	30 x 23 "	44.00	48.00	.....
No. 9.....	15 0 "	28 x 21 "	.....	.....	52.00
No. 9.....	1400 "	28 x 21 "	38.00	42.00	.....
No. 10.....	1200 "	28 x 20 "	33.00	37.00	.....
No. 10½.....	900 "	26 x 17 "	28.00	32.00	.....
No. 11.....	600 "	15 x 16 "	22.00	25.00	.....
No. 11½.....	400 "	21 x 15 "	17.00	20.00	.....
No. 12.....	240 "	19 x 13 "	14.00	.....	.....
Wheelbarrow Scale.....	1000 "	42 x 30 "	50.00	55.00	.....
First Size Rolling Mill Scale, with Rubber Spring Platform....	4000 "	39 x 30 "	.....	.....	125.00
Second Size.....	2500 "	30 x 23 "	.....	.....	95.00
Portable Cart Scales, for weighing 2 wheel Carts	6000 "	6½ x 3 feet	125.00	.....	.....

Dormant Warehouse Scales 1500, 2000, 2500, 3500 & 5000 lbs. capacity.
\$50, 60, 70, 85, \$120.

Ditto. ditto. with two Iron Pillars and Sliding Poise Beam
2500, 2500 and 5000 lbs. capacity.
\$25, 95 \$140.00.

Flour Scale—\$35.00.

Flour Packing Scales—\$40.00.

Cloth Scales.

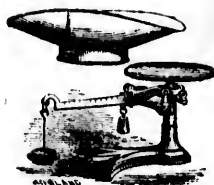
Hopper Scales for Grain, Portable, 30, 40, Bushels.

\$70, 80.

Ditto. Dormant one Iron Pillar, 60, 100, 125, 300, 500 Bushels.
\$90, 120, 140, 230, \$280.00.



COUNTER SCALE.



GROCEER'S SCALE.



EVEN BALANCE.



UNION SCALE.

DESCRIPTION.	CAPACITY.	Price with Tin Scoop,	Price with Brass Scoop.
Union Scale, with Platform & Scoop....	$\frac{1}{2}$ oz. to 240 lbs.	\$10.50	\$11.50
Grocer's Scale, with Platform & Scoop....	$\frac{1}{2}$ " 62 "	9.50	10.50
Grocer's Scale, with Platform, Scoop and Double Beam	$\frac{1}{2}$ " 62 "	10.50	11.50
Counter Scale, with Beam and Scoop....	$\frac{1}{2}$ " 36 "	7.50	8.50
Druggist's Scale, with Beam and Scoop..	1 drachm to 8 lbs.	7.50	.....
No. 1, Even Balance, with Weights	$\frac{1}{2}$ oz. to 10 lbs.	5.50	6.50
No. 1, Even Balance, with Balance Beam and Weights	$\frac{1}{2}$ " 10 "	6.50	7.00
No. 2, Even Balance, with Weights	$\frac{1}{2}$ " 6 "	5.00	5.50
No. 3, Even Balance, with Weights	$\frac{1}{2}$ " 4 "	4.00	4.50
Post Office Balance No. 1.....	$\frac{1}{2}$ " 32 oz.	.....	6.00
Post Office Balance No. 2.....	$\frac{1}{2}$ " 8 "	.....	3.60

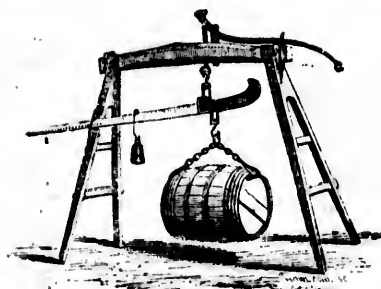
The following Scales we do not generally keep in stock, but they are furnished to order on short notice :—

MINERS AND TRANSPORTATION SCALES	- - - - -	2 to 3 Tons.
RAILROAD DEPOT SCALES	- - - - -	2 to 6 Tons,
RAILROAD TRACK SCALES	- - - - -	10 to 150 Tons.
WEIGH LOCK SCALES	- - - - -	150 to 900 Tons.

HAY AND STOCK SCALES.

2 Tons	3	4	6	10 Tons.
\$130 to 150	150 to 190	175 to 200	230 to 270	310 to 350

These prices are exclusive of the cost of timber and foundation, which is to be paid by purchaser.

**WEIGHMASTER'S BEAMS.**

Best Japanned Beams. Best Polished Beams.
 \$1.75 per 100 lbs. capacity. \$2.25 per 100 lbs. capacity.
 Second Quality Japanned Beams, not Fairbanks make,
 \$1.00 per 100 lbs. capacity.

N. B.—Smaller sizes than 300 lbs. charged as 300 lbs. all others at above rates.

FRAMES FOR DITTO.

TEA OR TOBACCO WEIGHERS' BEAMS AND FRAMES.

WHEAT BEAMS.—Various sizes, from 20 to 150 bushels.

CRAIN WEIGHERS' BEAMS—Capacity, 90 lbs.

LADGE EVEN BEAMS, (OLD STYLE.)

CLOTH BEAMS.

For determining the weight per yard by weighing the piece of cloth of
 40, 50, 70, 80 yards.

PAPER BEAMS.

For determining the number of pounds to the Ream by the weight of
one sheet,


SILK SCALES.

For weighing packages of Silk. Capacity, 100 oz. to 1-16th oz.

Hand Gold Scales,—Jewellers' and Bank Scales,—Prescription Scales,—Grocers' and Butchers' Even Balance Trip Scales,—Dynamometers, for ascertaining the Draft of Ploughs, Waggons, Mowing Machines, &c., &c.—Fairbanks' Standard, Dry and Liquid Measures,—Nest and Ring Weights, Brass Cup Troy Weights, Brass Weights in Blocks, Avordupois and Troy,—Gold Coin Weights, &c., &c., &c.

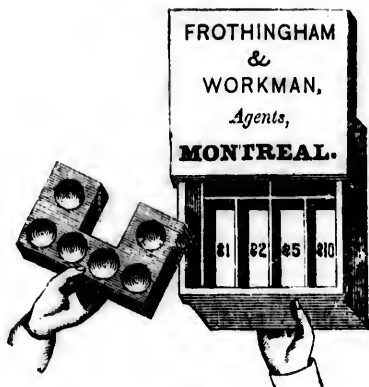
SHALERS' PATENT BALANCES OR FAMILY SCALES.

With Tin Scoops Capacity, 12 lbs
 " " " " 25 lbs

 Illustrated Catalogues of all the above Scales with full descriptions and prices affixed, furnished post free on application to us.

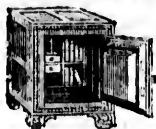
PATENT DETECTOR MONEY DRAWERS.

PRICE \$5.00, Each.



These money Drawers are invaluable to Cashiers, Shop keepers, and others who have the handling of money. They are very convenient and simple in their construction, they are perfectly safe, as the lock is susceptible of thirty (30) changes, "and is so ingeniously constructed that, if an unsuccessful attempt is made to open it, it rings a Bell, and instantly locks itself, so that the key or keys upon which it is set will not unlock it, until a new movement is made by the fingers;" a very valuable improvement, as it prevents expert thieves from running the changes through, should the Drawer be left alone for a considerable time.

C. D. EDWARDS' PATENT SALAMANDER SAFES.



DOUBLE FLANGE SINGLE AND DOUBLE DOOR SAFES WITH POWDER PROOF LOCKS.

Price lists on application to us,

SAFETY FUSE.

TOY, BICKFORD & CO'S PATENT SAFETY FUSE.

Patent Improved Safety Fuse	\$3.00
" " Water Fuse Single Taped	6.00
" " " Double "	9.00
" " " Triple "	12.50
New Patent Water Fuse No. 1	6.00
" " " " 2	9.00

POWDER.

Sporting Powder in Kegs **FF-FFF**
 " " in Canisters **FF** in $\frac{1}{2}$ lb. and 1 lb.
 " " " **FFF** in $\frac{1}{2}$ lb. and 1 lb.
 Blasting Powder in Kegs.

WEST CUMBERLAND HEMATITE IRON.

We have been appointed Sole agents in Canada for the WEST CUMBERLAND HEMATITE IRON COMPANY of England, and are prepared to offer at low prices the following, viz :—

HEMATITE PIG IRON No. 3.

" " " " No. 1.

This Pig Iron is very strong and is peculiarly adapted for Machinery Castings and other purposes, where great strength is required. The No. 3 mixes well with Scotch Iron, increasing the strength of the latter and otherwise improving its quality.

BEST REFINED BOILER PLATES ASSORTED LENGTHS AND THICKNESSES.

These Boiler Plates are very superior and will be found much better than the brands generally sold in this market.

All orders must be addressed to us.

BEST COLD ROLLED CANADA PLATES.



We will be prepared during the present year, to supply our numerous customers with the above celebrated brand of Canada Plates having purchased the entire make, for several years to come, from the manufacturer. These plates were first introduced by us five years ago, and sold extensively to the trade and consumers; they are without doubt, the best and cheapest Cold Rolled Canada Plates ever offered for sale in Canada. They gave entire satisfaction to all those who used them, and we are prepared to warrant them to do so for the future. The price will be very low, quality considered. We have to request our friends and customers to send us their orders for them in good season, so that they may be booked, and delivery secured at such dates as they may please to indicate.

These Canada Plates are made correctly to size and the Boxes warranted to contain, exclusive of the covers, 50 sheets, many of which are polished. Each box will be stamped with our registered trade mark, as above, without which none are genuine.

ALSO :

Boiler and Kettle Bottoms, Kettle Ears, Saucepan Handles, Brass Cocks and other Supplies for Tinsmiths and Sheet Iron Workers.

STEEL LIST.



Prize Medals awarded to T. JOWITT & SON at the London and Paris Exhibitions.

We have been appointed Sole Agents for Thos. JOWITT & SON's celebrated STEEL, (as well as for their Files) and keep always on hand a large Stock of that and other approved Brands. We call attention to the extract on page 95 from the *Metal Trades Advertiser* of England.



Granted according to Act of Parliament.

T. JOWITT & SON'S STEEL.

Best Cast Steel, Flat, $\frac{1}{2}$ x $\frac{1}{4}$ to 6 x 2 in.

" " " Square, 3-16 in. to 4 in.

" " " Octagon, for Tools, $\frac{3}{8}$ to 2 in.

" " " " " Miners Drills $\frac{3}{8}$ to 1 $\frac{1}{2}$ in.

" " " Oval, for Chisels, $\frac{3}{8}$ to 1 in.

Extra Temper Cast Steel for Axes.

" " Cast Steel for Scythes.

Common Cast Steel, Flat, Square and Octagon, assorted sizes.

Cast Steel for Nail Hammers.

Cast Steel Hammer Shapes to order; or as per illustrated Show Card.

Machinery Steel, Round, $\frac{3}{8}$ to 2 $\frac{1}{2}$ in.

" Cast Steel Extra sizes 3-16, 1-4, 5-16, 3-8, 7-16, 1-2, 9-16 in.

" " " " 2 $\frac{1}{4}$, 3, 3 $\frac{1}{4}$, 3 $\frac{1}{2}$, 3 $\frac{3}{4}$, 4 in.

Machinery Cast Steel, Flat and Square, Strong, Tough and Fibrous, suitable for Hammers, Crow Bars, Mill Dogs, &c.

Spindle Cast Steel to order.

Best Double Shear Steel.

Single Shear Steel.

German Steel, best quality.

Bliaster Steel best (L) $1\frac{1}{2} \times \frac{1}{2}$ in to 4 x 1 in.

" " Second quality (Swedes Bliaster)

Best Cast Steel for Mill and Circular Saws, warranted.

Best Sheet Steel, No. 8 to 28 Wire Gauge.

Second Quality Sheet Steel, No. 12 to 20 Wire Gauge.

Shovel Steel, best quality.

" " second "

Hoe Steel,

Spring Steel, good quality, all sizes from $\frac{3}{8} \times \frac{1}{4}$ to 4 x $\frac{3}{4}$ in.

Cast Steel Spring Steel, "T. Jowitt & Sons," Warranted extra quality
for Locomotive Springs and other special work.

Square Edge Steel for Tyres, all sizes.

Sleigh Shoe Steel, all sizes.

Toe Corking Steel, "

Steel Wire for Springs, all sizes to No. 24 Wire Gauge.

IMPORTED TO ORDER

Best Pivot Cast Steel to shape for Platform Scale Pivots.

Crinoline Steel Wire.

Three Square, Hexagon, Bevelled and Half Round Steels.

Bevelled Steel edge Cutter Die Steel for Leather Cutting Machine.

SEWING MACHINE STEEL.

Best Sheet Steel 16 to 18 in wide assorted thickness to No. 28 Gauge.

" " " in Strips—50 to 100 feet long by 3 to $3\frac{1}{2}$ in. wide from
No. 20 to 32 Gauge to order.

Round, Square and Flat Steel for Sewing Machine purposes, of various
qualities, &c.

SAFE STEEL

Welded Steel and Iron, for Safes and Shutters, in Sheets or in Bars,
to order. This Steel is made either soft Centre, the two outside plates
Steel and the middle plate Iron, or one side Steel and the other
Iron. To order.

*The attention of safe Makers and others is called to this article, which is made as
above will resist both the Drill and the Sledge Hammer of the Burglar.*

AGRICULTURAL STEELS.

Steel Finger Bars, Improved Hammered, to pattern or drawing, finished
Straight and Smooth, &c.

These Finger Bars are a very superior article and finely finished.

Steel for Mowing Machine Knife Bars 3-4 x 5-16. Other sizes to order.

" Plough Plates, cut to any pattern or shape.

" Gang Plough Plates, " " "

" Horse Hoe Plates, " " "

Steel Cultivator Teeth, " " "

Plough Plate Steel, 12 to 14 in. wide by 3-16 and 1-4 in.

Cultivator Tooth Steel, 4 to 6, by 1-8 and 3-16 in.

Harrow Teeth Steel 1 by 1-2 and 1 by 5-8 in.

Cast Steel Horse Rake Teeth, rolled oval in lengths, to order.

" " Rake Tooth Wire any size in Bundles.

Steel Spring Wire all sizes.

Machinery Steel, Round, Flat and Square for Agricultural Machines.

Machinery Spring Steel, for Agricultural Machines.

Best Cast Steel, for reaper sections, cut to order.

Extra Best Cast Steel, for Scythes.

Shovel and Hoe Steel, various qualities.

CROW BARS. &c.

Solid Cast Steel Crow Bars, 12 to 28 lb.

Jumpers, Cold Chisels, &c., &c.

STEEL FORGINGS.

Piston Rods, Mandrel Bars, Slide Bars, Shafts, Connecting Rods, and every
description of Steel Forging for Engineering purposes to any pattern
to order.

*These Forgings are recommended when great strength and lightness are
required, being made of a quality of Steel specially adapted to this purpose.*


NOTE,—“ In the extensive experiments lately made by Messrs. Robert
Napier & Sons, Glasgow, on the Strength of Steel and Iron, one bar of T.
Jowitt & Son's Cast Steel for Tools, bore, before breaking, a strain equal
to 148, 204 lbs. per square inch, the greatest strain borne by any of the
Steels tested ”—*Metal Trades Advertiser*

For FILE LISTS See Page 25.

METALS

AND OTHER -

HEAVY HARDWARE.**IRON.**

Scotch Pig Iron, Various Brands,
 Hematite Pig Iron, No. 1 and No. 3. (See page 92).
 Scotch Bar Iron, Best Brands,
 Best Staffordshire Refined Iron,
 Swedes Bar Iron,
 Norway Bar Iron,
 Best Refined Oval Iron,
 Best Half Round ditto.
 Best Refined Angle Iron.
 Best Best Rivet Iron.
 Norway Nail Rods,
 Best Hoop Iron,
 Best Band Iron,
 Best Boiler Plates,
 Hematite ditto. (See page 92).
 Low Moor ditto.
 Best Treble Refined Circular Headsheets,
 Best Sheet Iron, Singles, to 20 Wire Gauge,
 " " " Doubles, 22 and 24 ditto.
 " " " Trebles, 26 ditto.
 Best Cold Rolled Sheet Iron  No. 18, 20, 22, 24, 26.
 Galvanized Sheet Iron, Best Best,
 " " " Best Charcoal,
 Russia Sheet Iron, all numbers,
 Plough Moulds,
 " Points,
 " Beams, Long and Short,
 Axle Blocks &c.,
 Drag Bars, Iron to pattern.

IMPORTED TO ORDER.

Railway Bars,
 Bevilled Iron.
 Unequal sided Angle Iron, Tee Bars, Channel Iron and Fancy Irons of all
 patterns for Mouldings, Sashes, &c., &c.

For weight per foot of Iron, Bar, Plate, Sheet and Hoop : Brass, Copper and Lead. See
 Tables on pages 100, 101 and 102.

ANCHORS & CHAINS.

Anchors, " Woods" Iron Stock, small sizes, Proved,
 " " Medium ditto.
 " " Large ditto.

Coil Chain, 3-16, 1-4, 5-16, 3-8 in.

Best Proved Chain Cables, 3-8, 7-16, 1-2, 5-8, 3-4, 7-8, 1, 1½, 1¾ inch.


Best best Crane Chain.

For Weight per Fathom and proof Strain of Chain Cables and Register
 of Vessels, see Table on page 101.

TIN PLATES.

Coke Tin Plates, IC, 10 x 14,
Charcoal Tin Plates, Best Brands,
IC, IX, IXX, 10 x 14, 12, x 12,
IC, IX, IXX, 14 x 20,
DC, DX, DXX,
ICW, IXW, &c., &c., &c.
For size, weight and number of Sheets per Box. see Table on page 101.

CANADA PLATES.

Best Cold Rolled  Canada Plates. See Page 82

ALSO



Various other good Brands.

SUNDRIES.

Brass, Sheet,
Copper, Sheet,
" Bar,
" Tinned Sheet, 14 oz.
" Kettle and Boiler Bottoms,
Hazelton's Metallic ditto.
Rake Tooth Wire, $\frac{1}{4}$ in.
Best Bright Iron Wire, all numbers 0 to 20,
Annealed Iron Wire, No. 10 to 16
Ditto 18 to 32
Tinned Iron Wire, Various sizes.
Coppered Spring Wire,
Galvanized Iron Wire,
Telegraph Wire,
Copper Wire
Brass Wire.

NOTE.—Our Bright Iron Wire No. 0 to 18 and our Annealed Wire No. 10 to 16 are in full weight Bales of 63 lb. Each

Annealed Wire Nos. 18, 19 and 20 may be had either in $\frac{1}{2}$ lb. or 5 lb. Rings and No. 20 to 32 to 5 lb. Rings.

 All our Wire is best  Brand

Tin, Block or Ingot,
" Bars,
Antimony (Regulus),
Yellow Solder Solder,
Lining Metal, Patent F. & W. Best for heavy Machinery, 30 cts. per lb
" " No. 2, for Agricultural Machines, &c. 20 "
Zinc, Sheet, 9, 10 Zinc Gauges,
" " 8 " "
" in Slabs (Spelter)
Lead, Pig, Bar, Sheet and Pipe,
Shot assorted.

Galvanized Buckets 2, 3, 4, Gallons,
 R'vets, Boiler, Tank, &c., &c.
 Green's Steel Faced Anvils,
 Wright's Patent Solid Horn ditto.
 Armitage's Mouschole ditto.
 Wright's Patent Solid Box Vices,
 Attwood's Steel Faced Hand and Sledge Hammers.
 Blacksmiths' Bellows and Portable Forges, all sizes. *See List.*
 Refined Borax,
 Belly Pots,
 Bake Pans or Camp Ovens,
 Coolers and Sugar Kettles,
 Pot Ash Kettles,

GLASS.

Window Glass, Belgian, good quality to 25 inches,
 " " " " " 26 to 40 inches,
 " " " " " 41 to 50 "
 in Boxes of 50 feet.

PAINTS.

Paints, Dry Red Lead, Genuine.
 " " White Lead, "
 " White, in Oil, Genuine, No. 1, and No. 2
 Linseed Oil, Raw and Boiled,
 Putty,
 Gluc,

CORDAGE.

Rope Manilla, Leading Line - - - - -
 " " Halter Rope and larger sizes, in Coils - - -
 " " Deep Sea Line - - - - -
 " Jute Hemp, Leading Line - - - - -
 " " Halter Rope, and larger sizes, in Coils - -
 " " Deep Sea Line - - - - -
 Russia Deep Sea Line,
 " Signal Halyards,
 Tarred Rope, all sizes,
 " Lath Cord,
 " Spun Yarn,
 " Marline,
 " House-line,
 Engine Packing, Russia and Jute
 Bed Cords, Manilla, 3 thread 48 60 72 feet,
 " " " 6 " " "
 Hambro Lines 100 feet.
 Plow Lines.
 Bed Cords, Jute, 3 thread 48 60 72 feet,
 " " " 6 " " "
 Hambro Lines 100 feet,
 Plow Lines,
 Garden Lines, &c., &c.
 Oakum.
 Manufacturers supplies,
 Contractors ditto.
 Railway ditto.

We have constantly on hand, a large and complete assortment of
ENGLISH, GERMAN AND AMERICAN

SHELF HARDWARE,

Amongst which will be found the following articles, viz :

Table Cutlery, Pen and Pocket Knives, Scissors, Razors, Butchers, Cooks,
Oyster, Putty, Palette, Shoe, Farriers and other Knives.
Electro Plated, Nickel Silver and B. M. Goods—Spoons, Forks, Butter
Knives, Cruets, Toast Racks, &c.
Polished Goods, Dish Covers, Tea and Coffee Pots, Tinned Tea and Table
Spoons, Ladles, Basins, &c.
Tea Trays, Cash Boxes and other Japanned Ware.
Brass Foundry Goods, Stair Rods, Call Bells, &c.
Steel Toys, Pliers, Nippers, Pincers, Compasses, Cork Screws, Spectacles, &c.
Measuring Tapes, Pocket Compasses, Mathematical Instruments, Thermo-
meters, Barometers, Optical Instruments, &c.
Brushes, Combs, Fish Hooks, Awl Blades, Needles and other small-ware.
Files, Saws, Edge and Joiners Tools, Planes, Rules, Spirit Levels, &c.
Water Ayr, Washita and Orange Oil Stones, &c.
Chest, Cupboard, Pad, Trunk, Rim, Mortise and Dead Locks.
Lat her, Bolts, Hinges, Screws, Drawer, Shutter, Rim and Mortise Knobs, &c.
Light Iron Foundry Goods.—Hat and Wardrobe Hooks, Axle Pulleys, Screw
ditto, Castors, Turn Buttons, Chest Handles, Drawer Pulls.
Fire Irons, Stove Shovels, &c.
Brass Cocks, Faucets, Molasses Gates, &c.
Saddlery-Buckles, Whips, Whip Thongs, Hames, &c.
Red, White and other colored Chalks.
Chalk and Fish Lines, Saah Cords, Twines, Shoe Threads, &c.
Iron Garden Rakes, Traps, Wove Wire, Steelyards, Sad Irons, Sickles, and
Reaping Hooks.
Jack Chains, Trace and Halter Chains, Tinned and Enamelled Hollowware,
Brass Kettles, Galvanized Buckets, Wash Basins, Emery Cloth, Sand
and Flint Papers, &c.

ALSO

Tinsmiths supplies, Blacksmiths Tools and supplies.
Cabinet and Builders Hardware, &c., &c.

All of which we are prepared to sell at very lowest prices on the usual
terms.

FROTHINGHAM & WORKMAN.

Montreal, January 1872.

ADDENDA.

We have much pleasure in adding to our PRICE LISTS the following Tables, showing weight per Foot of Bar Iron, Boiler Plate, Sheet, Band, and Hoop Iron Brass, Copper, and Lead. Also weight per Fathom and proof test of Chain Cables, and other Tables, which, we trust, will be found useful to our Friends.

TABLES SHOWING WEIGHT OF METALS.

Weight of Wrought Iron, Flat, Square and Round.

WEIGHT OF IRON 1 FOOT AND 14 FEET LONG.

FLAT BARS.

Width.	Thickness.		Thickness.		Thickness.		Thickness.		Thickness.	
	1 ft.	14 ft.	1 ft.	14 ft.	1 ft.	14 ft.	1 ft.	14 ft.	1 ft.	14 ft.
1 in.	.833	11.62	1.25	17.50	1.66	23.24	2.08	29.12	2.50	35.00
1 1/8	.937	13.02	1.40	19.60	1.87	26.18	2.31	32.78	2.81	39.34
1 1/4	1.04	14.50	1.56	21.84	2.08	29.12	2.60	36.40	3.12	43.08
1 1/2	1.11	15.96	1.71	23.94	2.29	32.06	2.86	40.04	3.43	47.00
1 3/4	1.25	17.50	1.87	26.18	2.50	35.00	3.12	43.03	3.75	52.50
2	1.33	18.62	2.08	28.32	2.70	37.80	3.38	47.32	4.08	56.84
2 1/8	1.45	20.30	2.18	30.52	2.91	40.74	3.64	50.00	4.37	61.18
2 1/4	1.60	22.21	2.50	35.00	3.31	46.62	4.18	58.24	5.00	70.00
2 1/2	1.87	26.18	2.81	39.34	3.75	52.50	4.68	65.52	5.63	78.68
2 3/4	2.08	29.12	3.12	43.63	4.16	58.24	5.20	72.80	6.25	87.50
3	2.29	32.06	3.43	48.02	4.58	64.12	5.72	80.08	6.87	96.13
3 1/8	2.50	35.00	3.75	52.50	5.00	70.00	6.25	87.50	7.50	105.00
3 1/4	2.70	37.80	4.06	56.84	5.41	75.74	6.77	94.78	8.12	113.68
3 1/2	2.91	40.74	4.37	61.18	5.83	81.62	7.20	102.06	8.75	122.50
3 3/4	3.12	43.63	4.68	65.52	6.25	87.50	7.81	109.20	9.37	131.18
4	3.33	46.62	5.00	70.00	6.66	93.24	8.33	116.48	10.00	140.00
4 1/8	3.75	52.50	5.62	78.68	7.50	105.00	9.37	131.04	11.25	149.50
4 1/4	4.17	58.24	6.25	87.50	8.33	116.48	10.41	144.16	12.50	175.00
4 1/2	4.58	64.12	6.87	96.13	9.16	128.24	11.45	160.80	13.75	192.50
4 3/4	5.00	70.00	7.50	105.00	10.00	140.00	12.50	175.00	15.00	210.00

WEIGHT OF IRON 1 FOOT AND 14 FEET.

SQUARE AND ROUND BARS.

SIZES.	SQUARE.		ROUND.		SIZES.	SQUARE.		ROUND.	
	1 ft.	14 ft.	1 ft.	14 ft.		1 ft.	14 ft.	1 ft.	14 ft.
1-1	.208	2.91	.103	2.20	2	13.33	186.62	10.47	146.58
1-1/8	.325	4.55	.155	4.37	2 1/8	15.15	210.70	11.82	165.48
1-1/4	.403	6.56	.186	5.16	2 1/4	16.87	239.18	13.25	185.50
1-1/2	.488	8.93	.211	7.03	2 1/2	18.80	263.20	14.76	206.64
1-3/4	.593	11.66	.251	9.16	2 3/4	21.80	291.20	16.30	229.04
2	1.05	14.70	.328	11.50	2 1/2	22.06	321.44	18.03	252.32
2 1/8	1.30	18.50	1.02	14.28	2 1/2	25.20	354.80	19.79	277.00
2 1/4	1.87	26.18	1.47	20.58	2 3/4	27.55	385.70	21.63	302.82
2 1/2	2.55	35.70	2.00	28.00	3	30.00	420.00	23.60	329.84
2 3/4	3.33	46.62	2.61	36.51	3 1/4	35.23	492.80	27.05	387.10
3	4.21	54.91	3.31	46.31	3 1/2	40.80	570.12	32.07	448.98
3 1/8	5.20	72.80	4.00	57.20	3 3/4	46.87	656.18	36.81	515.34
3 1/4	6.30	88.20	4.91	68.10	4	53.33	746.64	41.88	586.32
3 1/2	7.50	105.00	5.80	82.46	4 1/4	61.20	842.80	47.28	661.02
3 3/4	8.80	123.60	6.81	96.74	4 1/2	67.50	945.00	53.01	742.14
4	10.20	142.80	8.01	112.14	4 3/4	75.20	1052.80	59.00	826.84
4 1/8	11.71	163.94	9.20	128.80	5	83.33	1164.02	65.45	916.89

HCOF IRON.

Weight of a Ten foot Length of Hoop Iron, and its ordinary Thickness on the Wire Gauge in lbs. and decimals.

Width and Thickness on the Wire Gauge	Weight.	Width and Thickness on the Wire Gauge.	Weight.	Width and Thickness on the Wire Gauge.	Weight.
$\frac{1}{8}$ x 21	.685	$\frac{1}{8}$ x 10	3.85	$\frac{3}{4}$ x 13	10.10
$\frac{1}{8}$ x 20	.885	$\frac{1}{8}$ x 15	4.10	$\frac{3}{4}$ x 13	10.80
$\frac{1}{8}$ x 19	1.21	$\frac{1}{8}$ x 15	4.35	$\frac{3}{4}$ x 13	11.60
$\frac{1}{8}$ x 18	1.55	$\frac{1}{8}$ x 15	4.70	$\frac{1}{4}$ x 12	11.00
$\frac{1}{8}$ x 17	2.04	$\frac{1}{8}$ x 15	5.25	$\frac{1}{4}$ x 11	18.75
$\frac{1}{8}$ x 17	2.27	$\frac{1}{8}$ x 14	6.50	$\frac{5}{8}$ x 11	23.40
$\frac{1}{8}$ x 16	2.86	$\frac{1}{8}$ x 14	7.15	$\frac{5}{8}$ x 10	28.10
$\frac{1}{8}$ x 16	3.12	$\frac{1}{8}$ x 14	7.80		

CHAIN CABLE.

Size and Weight, per Fathom, Proof Strain, &c.

Size of Chain.	Weight per Fathom.	Proof Strain.	Weight of Anchor.	Register of Vessel.
Inches.	Pounds.	Tons.	Cwt.	Tons.
3-16	3	...	...	...
1-4	4 $\frac{1}{2}$	...	...	...
5-16	6	...	...	...
3-8	10	...	...	...
7-16	14	...	...	...
1-2	16	...	...	...
9-16	20	...	...	...
5-8	27	...	...	...
3-4	35	...	...	...
7-8	48	...	...	...
1	63	...	...	...
1 1-8	70	...	...	...
1 1-4	89	...	...	...
1 3-8	108	...	...	...
1 1-2	125	...	...	...

SIZE, WEIGHT, &C., OF TIN, AS MANUFACTURED IN ENGLAND.

Brand Mark.	Length and Breadth.	No. of Sheets per Box.	Weight per Box.		
			Cwt.	qrs.	lbs.
IC.....	11 by 10	225	1	0	0
IX.....	11 " 10	225	1	1	0
IXX.....	11 " 10	225	1	1	21
IXXX.....	11 " 10	225	1	2	14
DC.....	10 $\frac{1}{2}$ " 12 $\frac{1}{2}$	100	0	3	21
DX.....	10 $\frac{1}{2}$ " 12 $\frac{1}{2}$	100	1	0	14
DXX.....	10 $\frac{1}{2}$ " 12 $\frac{1}{2}$	100	1	1	7
DXXX.....	10 $\frac{1}{2}$ " 12 $\frac{1}{2}$	100	1	2	0
IC.....	20 " 14	112	1	0	0
IX.....	20 " 14	112	1	1	0
IXX.....	20 " 14	112	1	1	21

WEIGHT OF A SUPERFICIAL FOOT OF SHEET LEAD, BOILER PLATE, SHEET IRON, COPPER AND BRASS, IN POUNDS.

Thickness in parts of an Inch.				Thickness by the Wire Gauge.			
Lead.	Iron.	No.	Brass.	Iron.	Copper.	Brass.	No.
1-32	1.53	1	13.75	12.50	14.50	13.75	16
1-16	3.70	2	13.20	12.00	13.90	13.20	17
1-8	7.40	3	12.10	11.00	12.75	12.10	18
3-16	11.10	4	11.00	10.00	11.60	11.00	19
5-16	14.81	5	9.61	8.74	10.10	9.61	21
3-8	18.51	6	8.12	7.50	9.40	8.03	22
7-16	22.22	7	6.85	6.85	8.70	7.51	23
1-2	25.99	8	6.21	6.21	7.90	6.86	24
9-16	29.62	9	5.62	5.62	7.20	6.18	25
5-8	33.31	10	5.00	5.00	6.50	5.50	26
1-4	37.00	11	4.38	4.38	5.80	4.81	27
3-4	40.73	12	3.75	3.75	5.08	4.12	28
7-8	44.41	13	3.12	3.12	4.31	3.43	29
1	48.15	14	2.50	2.50	3.61	2.80	30
	51.85	15			3.27		
	55.22						
	58.60						
	61.97						
	65.34						
	68.71						
	72.08						
	75.45						
	78.82						
	82.19						
	85.56						
	88.93						
	92.30						
	95.67						
	99.04						
	102.41						
	105.78						
	109.15						
	112.52						
	115.89						
	119.26						
	122.63						
	126.00						
	129.37						
	132.74						
	136.11						
	139.48						
	142.85						
	146.22						
	149.59						
	152.96						
	156.33						
	159.70						
	163.07						
	166.44						
	169.81						
	173.18						
	176.55						
	179.92						
	183.29						
	186.66						
	190.03						
	193.40						
	196.77						
	200.14						
	203.51						
	206.88						
	210.25						
	213.62						
	216.99						
	220.36						
	223.73						
	227.10						
	230.47						
	233.84						
	237.21						
	240.58						
	243.95						
	247.32						
	250.69						
	254.06						
	257.43						
	260.80						
	264.17						
	267.54						
	270.91						
	274.28						
	277.65						
	281.02						
	284.39						
	287.76						
	291.13						
	294.50						
	297.87						
	301.24						
	304.61						
	307.98						
	311.35						
	314.72						
	318.09						
	321.46						
	324.83						
	328.20						
	331.57						
	334.94						
	338.31						
	341.68						
	345.05						
	348.42						
	351.79						
	355.16						
	358.53						
	361.90						
	365.27						
	368.64						
	372.01						
	375.38						
	378.75						
	382.12						
	385.49						
	388.86						
	392.23						
	395.60						
	398.97						
	402.34						
	405.71						
	409.08						
	412.45						
	415.82						
	419.19						
	422.56						
	425.93						
	429.30						
	432.67						
	436.04						
	439.41						
	442.78						
	446.15						
	449.52						
	452.89						
	456.26						
	459.63						
	462.99						
	466.36						
	469.73						
	473.10						
	476.47						
	479.84						
	483.21						
	486.58						
	489.95						
	493.32						
	496.69						
	500.06						
	503.43						
	506.80						
	510.17						
	513.54						
	516.91						
	520.28						
	523.65						
	527.02						
	530.39						
	533.76						
	537.13						
	540.50						
	543.87						
	547.24						
	550.61						
	553.98						
	557.35						
	560.72						
	564.09						
	567.46						
	570.83						
	574.20						
	577.57						
	580.94						
	584.31						
	587.68						
	591.05						
	594.42						
	597.79						
	601.16						
	604.53						
	607.90						
	611.27						
	614.64						
	618.01						
	621.38						
	624.75						
	628.12						
	631.49						
	634.86						
	638.23						
	641.60						
	644.97						
	648.34						
	651.71						
	655.08						
	658.45						
	661.82						
	665.19						
	668.56						
	671.93						
	675.30						
	678.67						
	682.04						
	685.41						
	688.78						
	692.15						
	695.52						
	698.89						

Thickness in parts of an Inch.

WEIGHTS OF VARIOUS SUBSTANCES.

(Cubic feet and inches in lbs.)

Names.	Cubic feet		Cubic inch	
	in lbs.		in lbs.	
Cast Iron	459.35		2807	
Wrought Iron	486.65		2816	
Steel	489.8		2824	
Copper	755.75		3218	
Lead	708.75		4015	
Brass	537.75		3112	
Tin	456.		261	
White Pine.	29.56		.0171	
Salt Water, Sea.	61.3		.03721	
Fresh "	62.5		.03816	
Air	.07529			
Steam	.0689			

NOTE.—No. 1 Wire Gauge equals 5-16ths of an inch.
 " " 4 " " 1-4 " "
 " " 7 " " 3-16 " "
 " " 11 " " 1-8 " "
 " " 16 " " 1-16 " "
 " " 22 " " 1-32 " "

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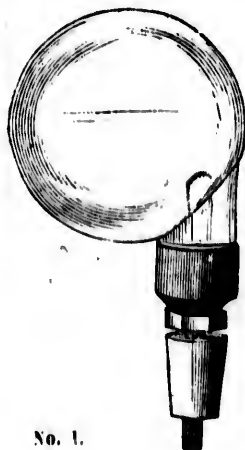
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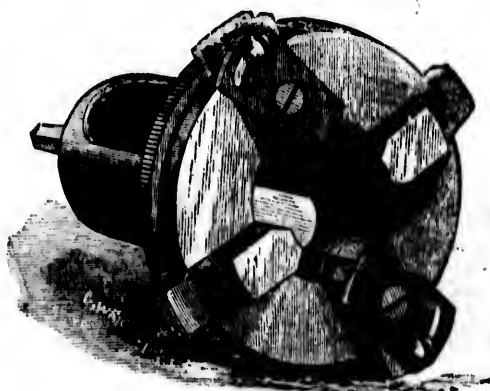
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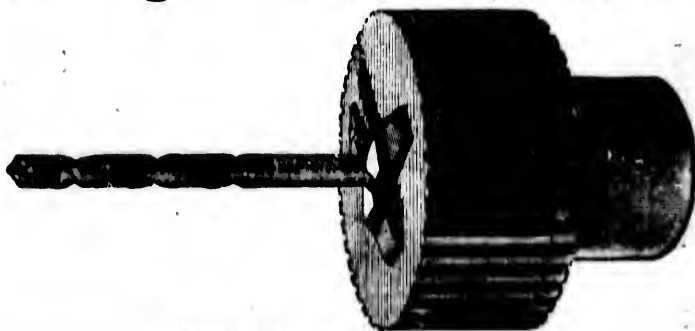
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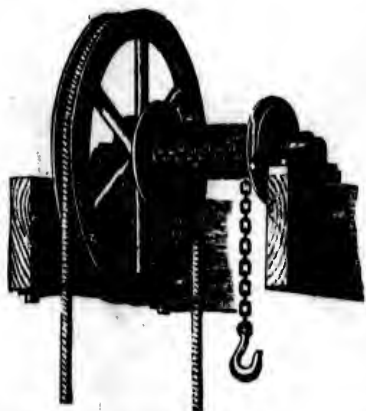
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PATENT SAFETY DISPATCH BRACKET CRAB.—(See page 84.)



DORMANT WAREHOUSE SCALES.
(See page 88)



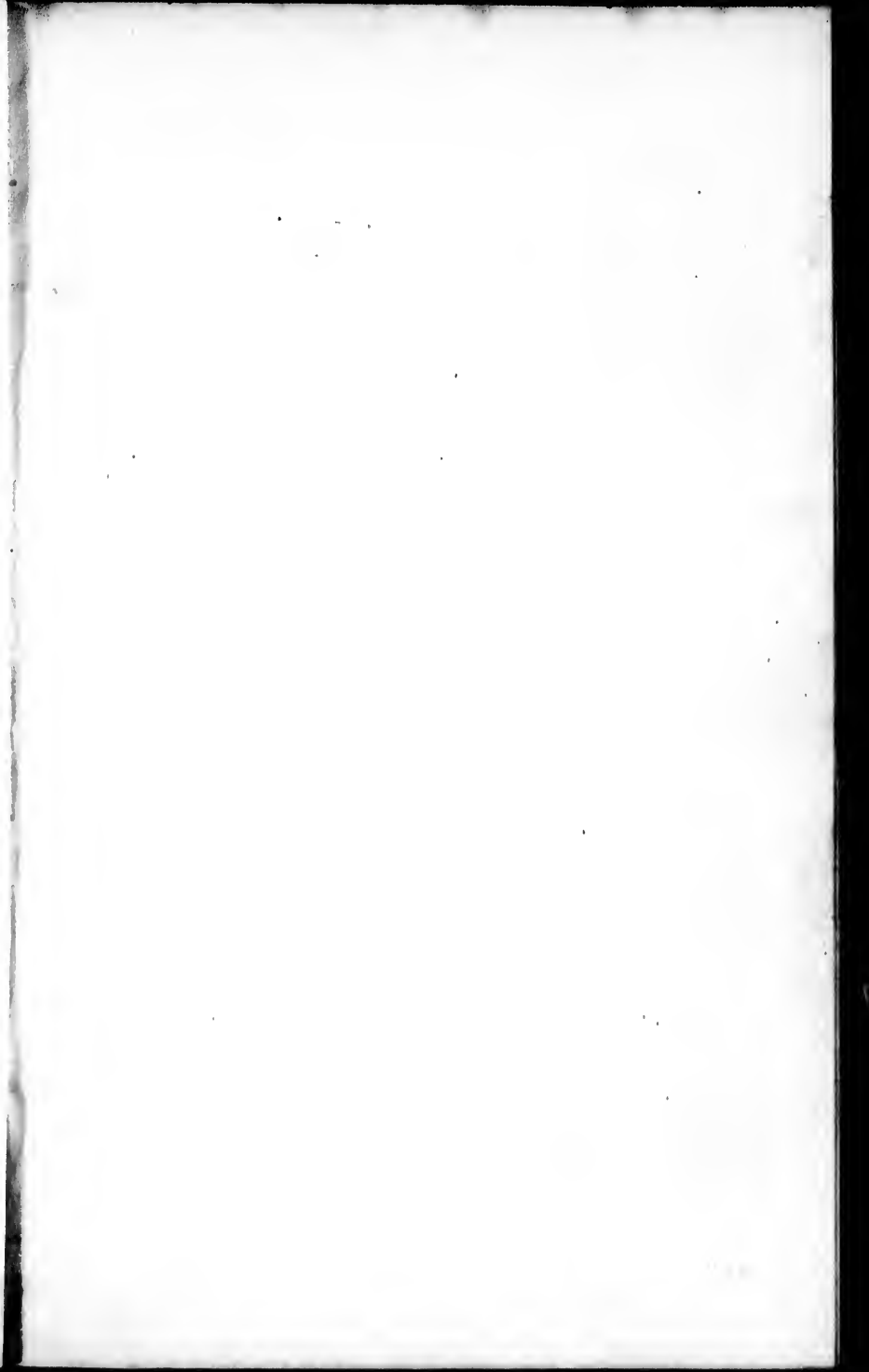
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